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An advertising supplement to March 2003

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# Just right for the mid-market

Manufacturers embrace Microsoft Business Solutions' enterprisewide solutions model; gain integrated functionality, leading-edge technology at an affordable price

By Jim Fulcher

Despite ongoing turbulence in the global economy, manufacturers continue to generate a large share of the world's economic output. In the U.S. for instance, manufacturers' contribution to the gross domestic product has remained steady—at roughly 20 percent a year—for the past three decades.

Recently, however, manufacturers are discovering that their continuing success is linked directly to their ability to conduct business beyond old, familiar borders. New economic development in places such as China and Eastern Europe—which is turning these regions into huge potential sources of both consumers and producers of goods—is just one of many developments that are changing the way manufacturers operate.

But not all borders that must be crossed are geographic. To capture business in newly emerging markets—while also maintaining a competitive edge in developed markets such as Europe and North America—manufacturers must execute the age-old fundamentals of building and delivering quality products within a reasonable amount of time, and at a fair price. The problem is customers' perception of what constitutes a reasonable amount of time and a fair price keeps changing.

The new business mantra is faster, better, cheaper. And as experts such as Gail Fosler, chief economist with **The Conference Board**, a New York City-based think tank, have noted, manufacturers' best hope for conquering this environment is expanding the use of information technology to "drive down costs and add greater value through integration of the downstream value chain."

In short, Fosler and others are saying that manufactur-

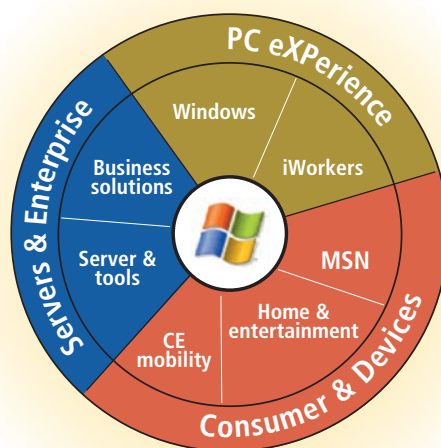
ers need a computing infrastructure that makes it easy to share data and create new business processes on-the-fly. They also say that these new business processes must involve both internal personnel and outside business partners such as customers and suppliers.

## Architecturally speaking

Just a few years ago, in the midst of the dot-com boom, pundits and other would-be sages declared that manufacturers would need a whole new generation of software applications to support this new B2B e-commerce model. As it turns out, what manufacturers really needed was a next-generation architecture—one based on Internet technology—to extend and enhance the enterprise resources planning (ERP) systems that have long been the backbone of most manufacturers' information technology (IT) business systems.

In simple terms, an ERP system is a collection of applications that manage all the information related to a company's business—including customer, product, production, employee, and financial data. All of these applications are linked to a single database, and users access the applications, and the information in the database, through a single interface.

## Microsoft's seven core businesses



**In introducing Microsoft Business Solutions as one of its seven core businesses—right up there with Windows and MSN—Microsoft has transformed the solutions landscape for small- to medium-size manufacturers.**

information throughout an enterprise.

"Without an ERP system in today's business climate, we'd face management by chaos," says Kevin Lehoullier, CFO at Fairfield, N.J.-based **Arthur Schuman Inc.**, the largest importer of Italian-style hard cheese in the U.S. "Managers would have to shoot from the hip when

## Brings order to chaos

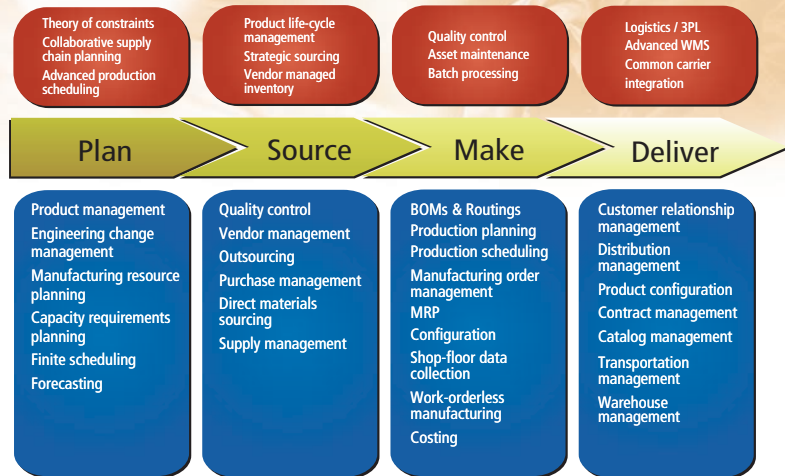
The advantages of this design are manifold, starting with the ability to quickly organize the process of storing and sharing critical

making decisions because they wouldn't have the right information at the right time. Business would be much more stressful, morale would be low, and profits would be slim.

"Using the Microsoft Business Solution's ERP system has enabled us to solve 60 percent of our headaches by integrating and coordinating operations," Lehoullier continues. "For instance, by improving inventory control, we were simultaneously able to reduce inventory levels from \$40 million to \$30 million, while increasing fill rates to 99-percent accuracy. The result is a better bottom line and improved customer-service levels."

Arthur Schuman is among the growing number of medium-size

## Manufacturing solutions



**Microsoft Business Solutions and its partners offer extended enterprisewide systems to manage all the information related to a company's business, across the entire range of business processes used in the manufacture and distribution of goods.**

## Pieces of the puzzle

Microsoft Business Solutions builds a strong a case for mid-market ERP users

**Microsoft Business Solutions** is a new name for some well established, experienced companies with more than 20 years in the business of enterprise resources planning (ERP) solutions for small, mid-market, and corporate businesses. In combination with the resources of Microsoft, this Fargo, N.D.-based vendor has almost instantly become a market leader, particularly when it comes to meeting the needs of small- and medium-size manufacturers.

"They've pulled together a set of strong applications," says Jim Shepherd, a senior vice president with Boston-based analyst firm **AMR Research**. "When you combine that with the underlying Microsoft technology, and the company's financial muscle, that's a compelling story for the midrange market."

To a large extent, Microsoft Business Solutions is a product of the ongoing vendor consolidation within the midrange enterprisewide software market. The building of this portfolio began when **Microsoft Corp.**, Redmond, Wash., acquired **Great Plains**, Fargo, N.D., and its broad set of manufacturing applications designed for small and medium single-site manufacturing, or divisions of larger organizations.

Just before it was acquired by Microsoft, Great Plains had bolstered its own solution set by purchasing a company called **Solomon Software** that had a well-regarded package of financial, manufacturing, and distribution applications for small- and medium-size manufacturers.

Having gained a feel for the enterprisewide software space with the Great Plains purchase, Microsoft next bought a Danish enterprisewide software vendor called **Navision**, which had previously purchased another Scandinavian soft-

ware supplier called **Damgaard**. This purchase gave Microsoft two additional software packages that expand the breadth and depth of functionality, scalability, and industry applicability of manufacturing solutions from Microsoft Business Solutions. The acquisition of these packages—called Navision and Axapta—also prompted the formation of a separate business unit called Microsoft Business Solutions.

"We have four great manufacturing solutions for a wide variety of industry and customer requirements," says Mike Frichol, general manager for manufacturing at Microsoft Business Solutions. "That gives our customers the ability to choose *the* solution that is the best fit for their business."

But the story doesn't end there.

Microsoft Business Solutions is working to put these packages on the same technology platform, which will be Microsoft's next-generation .NET framework. It also is building functional extensions encompassing areas such as customer relationship management and retail management—along with a platform for Internet-based customer and supplier collaboration—that will work seamlessly with both the current and future generations of these applications.

Frichol says that will give small- and medium-size manufacturers more flexibility in creating business processes that meet their customers' individual needs.

Meanwhile, AMR's Shepherd says this is just one of the many reasons that small- and medium-size manufacturers considering new enterprisewide solutions "would do well to look at Microsoft Business Solutions."

manufacturing and distribution companies benefiting from the emergence of **Microsoft Business Solutions**, Fargo, N.D., as a major player in the enterprisewide software market.

As one of the seven core business units of Redmond, Wash.-based **Microsoft Corp.**, Microsoft Business Solutions has created a technology platform that allows small- and medium-size manufacturers and distributors to assemble a complete, integrated set of leading-edge business applications. And those applications can be deployed without the overly expensive licenses, complicated customizations, and drawn-out implementation projects that led to the widespread perception that ERP was only practical for very large corporations, or within industries with fat profit margins.

"We actually have four great manufacturing solutions for a wide variety of industry and customer requirements," says Mike Frichol, general manager for manufacturing at Microsoft Business Solutions. "Our focus is on helping each of our customers find the solution that will best help them gain a competitive advantage in their specific markets."

### Extended functionality

Microsoft Business Solutions constructed its manufacturing solutions portfolio primarily by acquiring previously independent software vendors (See "Pieces of the Puzzle," page 3), but it can easily tailor these solutions to any of its customers' needs because they were all built on the same open Microsoft technology platform. That platform also is proving useful in Microsoft Business Solutions' own efforts to enhance its solutions by adding what industry analysts refer to as extended ERP functionality.

The recent release of the Microsoft Business Solutions CRM (customer relationship management) application marked the first step on that road. Other extended ERP modules—or what Microsoft Business Solutions calls its "surround" products—cover professional services automation and retail management. An enterprise portal also is in the works, along with a platform called the Microsoft Business Network that will support Internet-based collaboration with customers and suppliers.

Each of these products will work seamlessly with each of the four Microsoft Business Solutions enterprisewide packages, as well as with the ubiquitous Microsoft desktop products such as Word and Outlook. And looking for-

ward, Microsoft Business Solutions already is working to put all of these applications—both the core enterprisewide solutions and the surround products—on Microsoft's next-generation .NET technology framework. (See "What is .NET," page 5, for more).

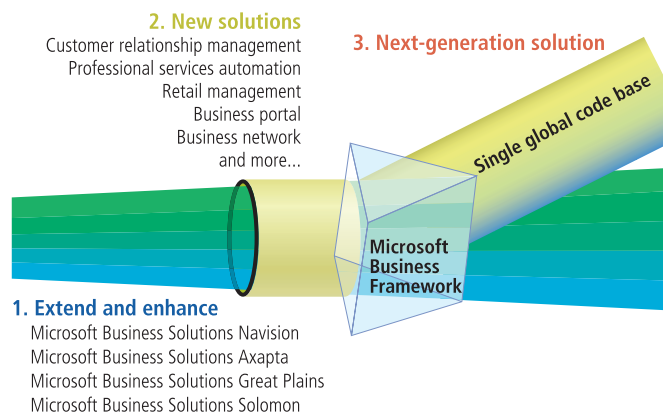
"Through ongoing development, the existing product lines will gain more commonality and become more like 'editions' of a single system rather than the completely different products they are today," explains Satya Nadella, corporate vice president, Microsoft Business Solutions. "Additionally, under the .NET Assurance program, when the next-generation system becomes available, users will be able to migrate to equivalent functionality without having to repurchase existing functionality."

### Meeting customer demands

All this is a boon for small- and medium-size manufacturers—often defined as those with annual revenues between \$5 million and \$500 million—which typically have to adhere to business rules that are spelled out by their customers and suppliers.

"Small- and medium-size manufacturers typically supply larger companies—the original equipment manufacturers—that tell the small- and medium-size manufacturers how they will do business," says Jim Shepherd, a senior vice president with Boston-based analyst firm **AMR Research**. "These large customers are demanding electronic connectivity from their suppliers because they

## Accelerated R&D investments support three broad initiatives



**Microsoft Business Solutions will extend and enhance existing solutions, introduce new solutions, and combine the best of the best in a next-generation solution based on Microsoft .NET. Additionally, under the .NET Assurance program, when the next-generation system becomes available, users will be able to migrate to equivalent functionality without having to repurchase existing functionality.**

want to collaborate on schedules, receive order status updates, and view other critical information in real time. To be an effective supply chain partner, the medium-size company must make its applications appear to be part of their customers' and suppliers' systems."

To satisfy this need, more and more small- and medium-size manufacturers are turning to Internet-based enterprise application suites like those offered by Microsoft Business Solutions. Katherine Jones, managing director, enterprise business applications, for

Boston-based **Aberdeen Group**, says manufacturers are adopting these suites for a number of reasons.

The ability to forge communication links with trading partners is key. But equally important, in Jones' view, is the deep integration between the various applications—and the link to a single database—that comes with an enterprisewide software suite.

"The use of disparate software systems is a big problem, particularly for small- and medium-size manufacturers," Jones argues. "It promotes inefficiencies and hin-

## Just what is .NET?

Next-generation framework will let manufacturers conduct business without borders

If you've heard the term Microsoft .NET but you're still not quite sure what it means, chances are you're not alone.

As Microsoft continues to educate the IT and business community, users of business software applications should consider this: knowing how to define .NET is not as important as knowing what .NET can do for your business.

"From a business systems perspective, .NET enables unprecedented connectivity and flexibility," says Mike Frichol, general manager of manufacturing at Microsoft Business Solutions. "Business users get easy access to a broad array of functionality across the entire business and that of their trading partners. They also have a wider variety of options for how they deploy that functionality and related business services."

That is a major advantage for small- and medium-size manufacturers that are routinely forced to adapt to business processes—and sometimes even adopt new technology—in response to demand from the larger companies that comprise their customer base. For these companies, "having the ability to deal with multiple customers who want business done in multiple ways is critical," Frichol says.

The need is not new. Consider the many small- and medium-size companies that lost business—or at the very least angered big customers—because they couldn't afford to build separate networks to accommodate the exact manner in which each customer wanted to exchange electronic data interchange (EDI) documents.

A .NET-based computing infrastructure easily solves that problem, along with many others. The difficulty—for Microsoft as well as many industry experts—has been in explaining exactly how .NET solves contemporary business problems.

That difficulty stems from the nature of .NET, a very broad-based set of tools. The most significant include the following:

- Visual Studio .NET is the comprehensive tool set for rapidly building and integrating XML Web services, Microsoft Windows-based applications, and Web solutions, including an object-oriented programming language called C# (pronounced c-sharp), to speed business value.
- .NET Enterprise Servers are built to be the foundation of business applications, drive needed functionality into an organization, and consolidate disparate environments within a business.

Microsoft Business Solutions—like numerous independent software vendors—is using these tools to build its next-generation enterprise software suite. Building that suite in the .NET environment means that it will have numerous features that make it easier for manufacturers to conduct e-commerce. These features include some of the services to which Frichol referred, such as Web commerce engines, and programs that manage security functions like verifying users' identities.

A system built in the .NET environment also would accommodate the use of Web services, which would be the primary source of the flexibility that Frichol spoke about. Web services essentially are software components that have been outfitted with specific communications protocols that allow them to pass information from one application to another over the Internet, without the need for a direct connection between the two systems, and without regard for which operating systems the applications run on.

These protocols are embedded within the .NET environment, which means that application developers, including Microsoft Business Solutions, can easily convert pieces of their applications to Web services. Developers will quickly see the benefits of this environment, bringing added value to their corporation much more quickly than ever before.

This would allow manufacturers to do such things as isolate specific bits of information that a customer wanted to see on a regular basis and have it automatically presented to that customer through a Web browser in exactly the format the customer desired. And what's even better is that different pieces of information could be presented to different customers—in different formats—without resorting to major programming.

As Frichol says, such a system would "improve small- and medium-size manufacturers' ability to work in the way in which their customers want them to. They can serve information to customers and suppliers in the way they want to see it."

That solves the dilemma of responding to the unique demands of multiple customers from a single business system, and is just one of the many potential benefits that manufacturers can expect once .NET-based systems become more commonplace.

ders productivity. The overall lack of coordination, limited communications capabilities, and the need to constantly re-enter data costs time and money.”

### A unified front

That certainly was the case at **MAAX Spas**, a Chandler, Ariz.-based manufacturer of hot tubs and spas sold by more than 200 specialty retailers, as well as major chains such as Atlanta-based **Home Depot**. Having grown through acquisitions, MAAX Spas had three manufacturing facilities—in Chandler, as well as Langley, British Columbia, Canada; and Beamsville, Ontario, Canada—running separate business systems.

“It was pretty inefficient,” recalls MAAX Spas CIO Bill Conati. “The same information was entered into multiple systems, then rolled up into our corporate systems.” When customers called for order status, Conati says there was no way to get that information “without actually going out on the shop floor and looking around.”

All that changed when MAAX Spas installed a Microsoft Business Solutions enterprisewide system. “We now broadcast an e-alert every afternoon that notes which orders are on the shop floor, how long they’ve been there, and why,” Conati says.

More important, the new software suites allow MAAX Spas to run the entire business from a single location—and in a much more organized fashion. For instance, with all of its facilities on a single system and adhering to uniform business processes, Maax Spas has reduced its number of working bills of material from more than

3,000 to 40.

“We used to have a number of ways of doing things because each division had its own format,” Conati says. “Standardizing on part numbers across the enterprise reduces the time it takes to enter those part numbers. It also reduces possible data entry errors, and improves visibility across the enterprise.”

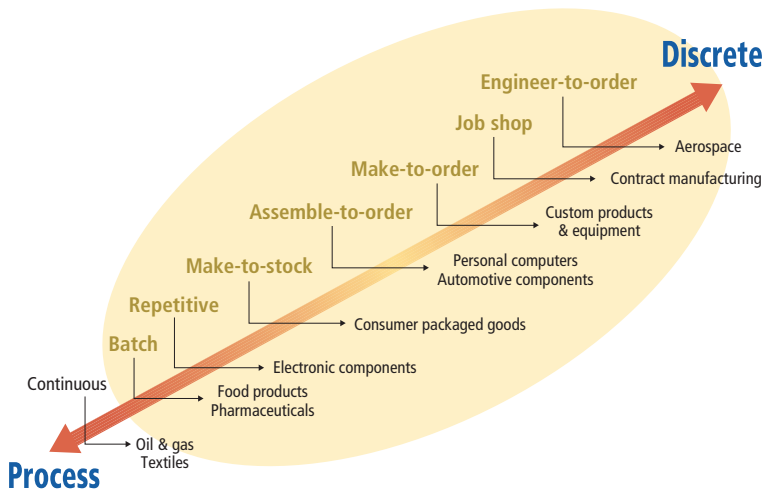
Conati says the open nature of the underlying Microsoft Business Solutions architecture also makes it easy for Maax Spas to add unique features to the system that enhance its ability to serve customers. “We’re able to build business software layers to give our customers—who are independent dealers selling spas to retailers—critical information,” Conati says. “The end result is the dealers now have the ability to go on-line and determine order status and expected shipping dates, which gives them a competitive advantage so they can make additional sales.”

### Make the complex simple

Frichol says the transformation at MAAX Spas is a reflection of what Microsoft Business Solutions sees as its primary mission, which is to help its customers make complex things simple. “We realize that just because a company is small, its business isn’t necessarily simple,” Frichol says. “Our systems are designed to help manufacturers manage complex business processes without having to build a large, and expensive, IT infrastructure. The required care, feeding, and maintenance of the Microsoft Business Solutions systems is simplified and minimized. We also make it easy for our customers to learn to use our systems.”

In addition to building systems that are inherently easy to use, Microsoft Business Solutions relies heavily on its global network of more than 4,500 value-added resellers to help its customers configure its systems to the customers’ exact needs.

“Small- to medium-size manufacturers typically prefer a local partner—whether local applies to a city, state, or region,” Frichol says. “But that proximity doesn’t come at the expense of vertical industry expertise. We encourage our resellers to focus on developing expertise for the target industries they serve. The customer benefits on multiple fronts: [access to] an authorized Microsoft Business



**Microsoft Business Solutions addresses the full range of vertical industries and manufacturing modes common to small- to medium-size manufacturers, either through the core system, extensions, or unique solutions from Microsoft Business Solutions partners.**



Solutions partner with local geographic presence and relevant industry expertise, and working with a vendor that is part of the local business community.”

That idea resonated with **Malibu Boats**, a manufacturer of tournament-quality boats used for water skiing and wake boarding based in Merced, Calif. “We stay competitive by leveraging technology, but we also know that software’s effectiveness often is governed by how people use it,” says Barry Bennett, the company’s inventory control manager.

### Add it up

For some time now, two classes of enterprisewide solution vendors have attempted to serve small- and medium-size manufacturers. Large enterprise vendors have offered slimmed-down versions of their systems, often at the cost of needed functionality, with far too much complexity still apparent. They also have continued to sell those systems through direct sales channels and consultant-driven implementations that drive up overall costs.

At the other end of the spectrum, some smaller vendors can deliver enterprisewide functionality at an affordable price. But few of these vendors have the resources to keep their systems technically up-to-date.

Microsoft Business Solutions solves all these problems. It has an outstanding portfolio of enterprisewide solutions, along with the financial resources, technical expertise to improve those systems over time, and an outstanding and cost-effective implementation channel to deliver solutions for the mid-market manufacturer.

As Bob Anderson, research director, small and medium-size business practice, enterprise/supply chain management, with **Gartner**, Stamford, Conn., says, “When you add these factors up, they give Microsoft Business Solutions a long-term edge on the market.”

For more information on innovation from **Microsoft Business Solutions**, go to [www.microsoft.com/businesssolutions](http://www.microsoft.com/businesssolutions) or call 1-888-477-7989 option 1

## Flexible business processes

With Microsoft Business Solutions, customers do business their way

The order-management process at **Lindab Inc.**, Stamford, Conn., is a testament to how well Microsoft Business Solutions enterprise software meets the needs of contemporary, small- and medium-size manufacturers.

Lindab is the North American business unit of a Swedish company that builds custom sheet-metal components for heating, ventilation, and air-conditioning systems. With Microsoft Business Solutions providing its enterprise software engine, Lindab has created a process through which instructions for how to build its parts travel from a customer’s desktop to the cutting and stamping machines on Lindab’s shop floor without human intervention.

“The Microsoft Business Solution development environment is based on open technology,” says Dwight Marcellus, Lindab’s MIS director. “That made it easy to do the customizations—and the integration with other applications—necessary to execute this order-management process.”

Finding an enterprise system with such inherent flexibility was crucial to Lindab because it does business in 22 different countries, which means that its customers not only employ many different software systems, but they speak numerous languages and trade in multiple currencies.

Lindab was sensitive to other issues as well, at the time it selected Microsoft Business Solutions. “We already had been through a failed—and quite costly—ERP implementation with another vendor that offers a bigger software package than we needed,” Marcellus says, adding, “so we were looking specifically for a midrange solution.

“This system clearly is oriented for small- and medium-size manufacturers,” Marcellus continues. “It also has all the capabilities to handle multiple currencies and the paperwork that go along with being an international company.”

But the final selling points for Lindab, according to Marcellus, were the solution’s manufacturing functionality and the open technology on which it was built. Those elements allowed Lindab to devise its new order-management process.

To create that process, Lindab built an extension to the configuration management program. “There are more than five billion possible configurations for duct work and fittings that we could build,” Marcellus says. “But we were able to build 200 basic items in the solution, along with a certain number of options for each one, to support most of our customer requirements.”

Customers start the ordering process by downloading a piece of software called CADvent from Lindab’s Web site. Marcellus says Lindab created this piece of freeware because it allows customers to configure products in the same design format that Lindab uses.

“The result is that HVAC professionals can simply and quickly create precise part design drawings,” Marcellus says. “And we don’t have to reengineer those drawings because we are getting them in the same configurations, and essentially the same design software that we use. It also speeds the quoting process because the CADvent software uses Lindab part numbers and creates a cost estimate before the drawings are transferred to our system.”

The real payoff comes once Lindab and its customer agree on a price. The order is transmitted to the ERP system, which parses out the appropriate data to the financial and purchasing systems while also sending the manufacturing instructions to the shop floor. “This has significantly lowered our costs and improved our customer service levels,” Marcellus says. “And that has given us a considerable competitive advantage.”