

Technology Strategies for Progressive Manufacturers

The *GREAT* Enterprise Applications *RACE*

ast December, a watershed event in Pleasanton, CA, caused a sea change in Walldorf, Germany. The impetus for the change, of course, was Oracle Corp.'s hard-fought and ultimately successful \$10.3 billion bid to buy California-based competitor PeopleSoft. The resulting aftershock a continent and an ocean away was the realization at the headquarters of undisputed market leader SAP AG that a potent rival had been conceived.

SAP managers leaped into action. For several months, while Oracle had aggressively pursued PeopleSoft, SAP managers had been hard at work developing a plan to counter the expanded Oracle. Now, they called a series of meetings with selected teams to communicate the strategy.

"They had a very strong plan the day the deal closed," says Celestine Vettical, an SAP manager at the time who has since joined Microsoft. "They definitely knew the strengths and weaknesses of Oracle and PeopleSoft and of such a deal. The response was im-

mediate, companywide and well coordinated." The message SAP wanted to deliver to the market: Let Oracle pursue a risky and time-consuming growth-through-acquisition strategy. SAP would continue to gain market share through organic growth and by focusing on vertical industries such as manufacturing.

"We understand logistics. We understand manufacturing. We understand supply chain," says Bill McDermott, president and CEO of SAP America Inc. "They are a database company that has made a risky foray into the applications space. The difference is so startling that it's as clear as the difference between night and day."

It's no wonder that SAP reacted as quickly and as pointedly as it did. After all, the combination of Oracle, PeopleSoft and JD Edwards — which PeopleSoft had acquired just a few months prior to being gobbled up by Oracle — created an ERP competitor with 23,000 customers, worldwide brands and strong presence in high tech, automotive and other key manufacturing segments. Subsequent acquisitions — nine in all so far this year — have only served

to bolster Oracle's posture against SAP, particularly the company's March acquisition of retail software leader Retek, Inc. and the currently-proposed \$5.85 billion purchase of customer relationship management software pioneer Siebel Systems Inc., which, according to analysts, will allow Oracle to sail into a virtual tie with SAP in terms of CRM market share.

But, more than just setting up a market share confrontation between two hefty and aggressive competitors, Oracle's acquisition binge has also put into motion a collision between two enterprise software market giants with, in many respects, very different views on how the market should and will evolve and on what is best for customers. Ultimately, manufacturing companies, particularly those planning to replace legacy systems or for the first time automating key business processes with commercial software, must understand the profound differences between Oracle and SAP in order to select the vendor that will be most aligned with their needs.

Not that manufacturers will be limited to choosing between only SAP and Oracle. Despite rapid, industry-wide consolidation, a handful of viable, second-tier vendors — including SSA Global, Infor, QAD and Epicor, to name a few — continue to successfully target mid-size manufacturers. And, despite its struggles so far in enterprise applications, Microsoft shows no

signs of abandoning the market.

Still, say experts, SAP and Oracle cast shadows that cannot be ignored. "It's never going to be a two-horse race, but you're talking about two companies that, between them, control something like 80% of the [large enterprise] market," says Jim Shepherd, a senior vice president at AMR Research (Boston). "And their control is only likely to increase as the number of competitors continues to drop. So

have long maintained that the key to delivering a robust, fully-integrated enterprise suite is to ensure that all modules — ERP, CRM, supply chain management, for example — share a single data model and a common database structure. That's perhaps not surprising for a company that started as a database management system vendor.

SAP officials, on the other hand, insist that in an era of service-oriented architectures and composite applications, a data-centric approach to application architecture is passé. Applications, they say, should be model-driven and should revolve around publicly-defined processes to which customers and partners can easily and quickly integrate. SAP's current major product thrust, Enterprise Services Architecture (ESA), is an ambitious, multi-year effort to publish those process definitions. But it's not just technology philosophy that divides the companies. The rivals are also rooted in profoundly different cultures. Oracle's, defined by swashbuckling, sailboat racing CEO Larry Ellison, has always reflected intense sales aggressiveness, entrepreneurial risk-taking and occasional lapses in execution. The culture at SAP, whose co-founder and current supervisory board member Hasso Plattner is also a serious sailboat racer, is defined by caution, thorough preparation and, usually, precise execution.

"SAP is the ultimate ERP machine," says Bob Parker, vice president of research at Manufacturing Insights (Framingham, MA).

Given those cultural differences, it's not surprising that, over the last year, the competition between SAP and Oracle has often become heated, almost personal. Although SAP has historically accounted for a huge slice of Oracle's database business, the two companies came out swinging at each other. Just days after Oracle consummated its pursuit of PeopleSoft, SAP launched what it called Safe Passage, a program designed to lure JD Edwards and PeopleSoft customers to SAP. Oracle immediately responded with Oracle Fusion for SAP (OFF SAP), a similar program. Reseller partners and customers of both companies report that, in direct, head-to-head contests for key accounts, lobbying has been intense and discounts sometimes deep.

"We were a high profile account, so they both came after us pretty hard," says Nick Macera, CIO at luggage manufacturer Samsonite Corp. (Denver), which, after an 18-month study that narrowed possible vendors to SAP or Oracle, decided in March to replace its JD Edwards ERP system with SAP. (See sidebar.)

Much of the back and forth, of course, amounts to little more than battling press releases. Still, look beyond the bickering and one thing is clear: The face-off between Oracle and SAP represents an important change in the enterprise software market. For the first time, two companies have accumulated such significant market share between them that they — and the partner ecosystems that grow up around them — are likely to define how the enterprise software market evolves going forward. That means everything from the pace and direction of new product innovation to software licensing prices and policies.

In particular, small and mid-sized manufacturing companies and those currently running older, legacy systems will need to have a good grasp of the different strategies espoused by SAP and Oracle. They are the companies most likely to face a decision between the two in the near future. The vast majority of larger enterprises

William R. McDermott, president and CEO of SAP America, joined SAP in late 2002. Formerly with Siebel Systems, he is responsible for all of SAP's business activities in the U.S. and Canada.

ERP market

TWO TITANS:

2005 Market Revenue Share Forecast



Source: AMR Research

it's very important to understand the differences between the strategies of the two companies."

Those differences run deep and go well beyond Oracle's determination to grow through acquisition versus SAP's preference — its recent purchase of manufacturing intelligence vendor Lighthammer notwithstanding — for organic growth. Take something as fundamental as application architecture, for example. Oracle officials

have already made an enterprise software vendor decision, and many have already examined or selected either SAP or Oracle. They are unlikely to change suppliers. But many mid-sized manufacturers — in North America and rapidly-growing economies of Asia and elsewhere — either have yet to do so or will soon replace existing systems. A survey earlier this year by AMR and *Managing Automation* revealed that nearly 50% of mid-sized manufacturing companies will make substantial changes to their existing ERP systems over the next 12 to 18 months.

In the crucial test of applications architecture, Oracle and SAP have radically different views on how to build software.

“That’s a very large market,” says Shepherd. “There’s a lot at stake for both companies.”

So what are the major strategic differences between SAP and Oracle? And how are those differences being manifested in important decisions that will affect existing and new customers? To help manufacturers understand those key differences, *Managing Automation* has compared the two vendors in five key areas: Manufacturing strategy, product strategy, small and mid-size market strategy, partner strategy and leadership. Here’s what we found:

✓ MANUFACTURING STRATEGY

In the early 1990s, SAP took a major departure from the paths of its ERP competitors, developing industry-specific versions of its R/3 application suite. The first two industry-specific versions focused on the oil and gas and the utilities markets. Since then, the company has rolled out a total of 29 versions of its applications tailored for different industries and structured much of its marketing and product planning and development around vertical industries.

The moves have paid off, propelling SAP to market share dominance in many manufacturing verticals, such as chemicals and pharmaceuticals. SAP plans to attempt to press its advantage with its next generation of Web services-based applications by defining and publishing industry-specific business processes as part of the company’s ESA initiative.

“In the 1990s, we got a strong message from customers that generic applications weren’t enough,” says Nils Herzberg, chief operating officer for industry solutions at SAP. “If you are a discrete manufacturer, you might want applications that enable you to sell from stock, but if you are in a process industry, you might have serial number and batch tracking requirements. A generic product can’t do all of that.”

Until recently, Oracle has been less focused than SAP on pushing industry-specific features into its applications. While Oracle’s applications do include deep flow and process manufacturing functionality, thanks partly to the influence of earlier-acquired applications from vendors such as Datalogix, the company has not rolled out industry-specific versions nearly to the extent that SAP has.

“SAP decided a long time ago that it would go to market by vertical, but Oracle has not done that with its own or acquired products,” says AMR’s Shepherd. “What they’ve offered, for the most part, was a single horizontal product that has some features for verticals but that are buried. It’s been a disadvantage for them.”

Indeed, that approach has cost Oracle business. Samsonite’s decision last March to replace its JDE applications with MySAP ERP rather than Oracle’s E-Business Suite, for example, was heavily influenced by the

fact that SAP offers what it calls the Apparel and Footwear Solution (AFS). Though originally developed for a different retail-oriented vertical industry, AFS had what Samsonite was looking for — order entry, purchase order, planning and forecasting screens that present product colors and sizes in easy-to-use grids, for example.

“Both SAP and Oracle had the product breadth. But when you get down to the functional depth, there were missing pieces in Oracle,” says CIO Macera.

Some manufacturers have been willing to take on the risk of adding industry-specific functionality to the Oracle apps. Window manufacturer Pella Corp. (Pella, IA), for example, selected Oracle’s E-Business Suite as part of a push to transform itself using lean and flow manufacturing principles and replace 120 different home grown systems. The company chose Oracle over SAP because, in part, Pella felt Oracle would be easier and less expensive to deploy.

But Oracle’s applications lacked certain features important to Pella’s configure-to-order business model. Pella, for example, needed a product configurator that was flexible enough to construct bill-of-materials from thousands of different part options. Pella, says senior manager Rick Hassman, decided to work with Oracle and implementation partner Deloitte to enhance the configurator and integrate it with Oracle’s manufacturing applications. The enhancements and the integration will be supported by Oracle, Hassman says.

A key part of Oracle’s applications strategy going forward is to beef up its out-of-the-box functionality for vertical industries, including manufacturing verticals. According to John Wookey, Oracle’s senior vice president for applications development, Oracle already has had some success with vertically-focused functionality such as software for supporting clinical trials at pharmaceuticals companies. And the company’s acquisition of Retek Inc. and iFlex Corp. were intended to strengthen Oracle’s focus on retail and banking verticals, respectively. Now, says Wookey, Oracle will take a similar approach to other key verticals, using acquisitions as one tool.

“There are some potential acquisitions we are looking at to give us either key technology tools that will make us stronger in those areas or that will give us a broad customer footprint. In the next few months, you’ll start seeing more activity from us that isn’t just about banking and retail.”

In the meantime, says Wookey, Oracle is not abdicating any manufacturing vertical to SAP. Even pharmaceuticals. “As much as they may be the leader in pharma today, we see a horizon that is five to 10 years out where we become the leader in that market,” says Wookey.

Oracle is also playing catch-up to SAP when it comes to horizontal functionality for manufacturing.

Take the growing Product Lifecycle Management (PLM) market, for example. SAP, which launched its PLM offering in 2000, in 2004 ranked sixth in overall PLM market share with \$403 million in revenue, according to AMR. Although Oracle does offer a Product Information Management Data Hub product, the company so far is practically a PLM non-player.

Oracle hopes to correct that soon, says John Webb, vice president of supply chain product strategy. “Two areas that we’re putting a lot of focus right now are PLM and logistics,” says Webb. (Webb

John Wookey, Oracle senior VP of applications development, joined Oracle in 1995 from Ross Systems. He is responsible for all Oracle, PeopleSoft and JD Edwards applications.

spoke prior to Oracle's recent acquisition of logistics and transportation management software vendor G-Log.)

While Oracle has some ground to make up in terms of vertical depth and horizontal reach of its application suite for manufacturing, the company is ahead of SAP when it comes to direct, integrated support for plant floor manufacturing processes. Unlike SAP, which has largely avoided incorporating Manufacturing Execution System (MES) functionality directly into its application suite, Oracle's E-Business Suite includes Shop Floor Manager and Work in Process modules which, among other things, support creation of routings and workflows, part- and lot-level tracking and work-in-progress tracking, according to Colin Masson, a research director at AMR.

SAP, on the other hand, lacking strong built-in MES functionality, has joined competitors such as Microsoft in pushing for ERP-to-MES integration. Over the past two years, SAP has become a leader in defining and promoting integration standards such as ISA95 and has forged partnerships with MES vendors such as Visiprise, Wonderware and Siemens Automation.

"About 18 months ago, SAP rediscovered manufacturing and started communicating they can't do everything themselves," says Claus Abildgren, product marketing manager at Wonderware (Lake Forest, CA), which is using SAP's Portal and Exchange Infrastructure as well as ISA95 specifications to integrate its applications with SAP's. "Since then, SAP has been very much involved partnering with plant floor software vendors like us. Oracle has not been involved at the same level."

✓PRODUCT STRATEGY

SAP and Oracle don't agree about much, but their product strategies match up in at least one important respect: Both say service-oriented architectures are the future of enterprise applications, and both think it's a good idea for customers to buy SOA middleware such as application servers and portals as well as applications from a single vendor.

Moreover, both SAP and Oracle are rolling out collections of SOA-enabling tools that, at least in terms of overall design and packaging, are remarkably similar. Both SAP's NetWeaver and Oracle's Fusion Architecture include — or will include — application servers, portals, integration servers, service registries, business intelligence tools and business process management tools, all intended to allow customers to run and manage applications as they transition into collections of composite services rather than hard-wired, monolithic code.

But there are differences between the two vendors when it comes to implementation of their SOA tool sets. Oracle's Oracle Application Server, for example, is more mature, according to analysts, and — with an estimated 26,000 users — far more widely deployed than SAP's NetWeaver Application Server. And Oracle is already shipping an SOA-aware business process management tool that conforms to the key Business Process Execution Language standard. SAP has only promised such a tool. Oracle is already shipping a services repository, while SAP has promised one for next year.

Overall, however, the SOA toolsets from Oracle and SAP are similar — at least on paper.

Beyond that, however, the two vendors are at odds over how today's enterprise applications, using these tools, will transition to an SOA future and over the key benefits that future will confer to customers. SAP, on one hand, has said its strategy is to use its NetWeaver technologies along with the ESA process definitions now

being compiled to, essentially, decompose MySAP ERP and its other enterprise applications into a collection of Web services. Using a services repository and business process management tools, SAP says, customers will then be able to reassemble, or compose, these services to best support their rapidly-evolving business processes. SAP has said this will be in place by 2007.

The ultimate benefit for customers, say SAP officials, will be more flexibility and quicker process innovation. "SOA provides us with the ability to innovate easier than in the past," says Peter Graf, SAP's executive vice president for solutions marketing. "It allows you to take services and compose them into new business processes. That is our ultimate goal. And on that we differ hugely from Oracle."

Indeed, in some ways, Oracle's challenge in getting to SOA is diametrically different than SAP's. Where SAP is attempting to decompose what has historically been a monolithic and difficult-to-change set of applications, Oracle is faced with melding a collection of different enterprise applications from different vendors — Oracle, PeopleSoft, JD Edwards, Siebel, Retek, etc. — into a coherent whole.

The company has launched what it calls Project Fusion to bring all of these applications together, selecting the best elements of each to create a new, integrated suite. Oracle is using its Fusion Architecture tools to accomplish this consolidation, a task the company says will be finished by the end of 2008 (while it continues to support and extend the existing versions of its acquired and home-grown applications.) In the end, says Oracle, it will have a set of SOA-enabled, tightly integrated applications which, like its E-Business Suite and unlike SAP, will share a single data model.

The SOA infrastructure underlying its Project Fusion applications will allow Oracle, like SAP, to easily model, define and change business processes. But, just as importantly, says Wookey, the consistent, common data model underlying all of its applications will allow Oracle to implement what it is calling Daily Business Intelligence, basically real-time business intelligence. Unlike SAP and most vendors of BI tools, says Wookey, Oracle will not require BI data generated from enterprise applications to be downloaded into a separate data warehouse before it can be viewed and analyzed. Using features built into Oracle's database system, Daily Business Intelligence, Oracle says, will allow users to directly view and analyze production data as it is being created.

SAP is betting that it can **keep its number one position** through organic growth, but can it really stay outside the acquisition game going forward?

"I know we run the risk of being accused of being data-centric," says Wookey. "But we're willing to take that risk. For us, the holy grail is business insight, understanding what's going on in your organization and in your marketplace and being able to put that knowledge into action."

SAP officials, not surprisingly, are scornful of Oracle's real-time BI focus and of its Project Fusion plans. Attempting to build analytics on top of production data will only bog down the performance of the applications, says SAP's Graf. And, adds Graf, it's doubtful Oracle will be able to roll out its line of Project Fusion applications on its announced schedule.

“Basically, they have to redevelop their applications from scratch,” says Graf. “It took them three years to get their E-Business Suite applications stable. How much credibility do they have now that they can build new applications on time and with quality by 2008? It’s a joke.”

As dramatic as these differences may be, many manufacturers are less interested in quasi religious architectural debates and more involved with pragmatic concerns such as the total cost of ownership and ease of application implementation. On that score, Oracle enjoys a widespread perception that, at least compared to SAP, its products today are less complex and less expensive to deploy.

Pharmaceuticals manufacturer Colorcon Inc. (West Point, PA), for example, selected Oracle’s E-Business Suite over SAP despite the fact that SAP is widely deployed in its industry. “We knew SAP was practically a de facto standard in pharmaceuticals, but deployment complexity and cost was a consistent concern for us,” says Perry Cozzone, CIO at Colorcon, a division of Berwind Pharmaceutical Services, Inc. “Price point, perceived ease of implementation and flexibility were key issues,” says Cozzone.

Even manufacturers who, in the end, chose SAP say they perceived flexibility advantages in Oracle. Samsonite, for example, was impressed by pre-defined workflows in E-Business Suite that can make it easier to implement. “Oracle comes across as easier to implement,” says CIO Macera.

Samsonite, however, worried that the number of customized workflows required to make up for lost functionality might be difficult to carry forward in new releases of E-Business Suite. That contributed to its decision in favor of SAP.

✓SMALL AND MID-MARKET STRATEGY

Traditionally, both SAP and Oracle have spent most of their time and energy chasing large enterprise applications customers. That’s because larger companies have always represented the sin-

gle biggest chunk of the enterprise applications market. In 2004, companies with sales of \$1 billion or more accounted for \$18.39 billion in enterprise applications revenue, or 38% of the total market.

That is rapidly changing, however. Between now and 2009, AMR estimates, small and medium-sized company spending on enterprise applications will grow at between 7% and 9% per year compared to a 4% spending growth rate for larger enterprises.

It’s not surprising, then, that the small and medium-sized markets are shaping up as a major battleground in the contest between Oracle and SAP and, for that matter, between important players such as Epicor, Microsoft, SSA and Infor. With growth in the large enterprise segment of the market settling into the low single-digit range, however, it’s particularly important for SAP and Oracle to establish a beachhead in the SMB space.

Both Oracle and SAP are still relative newcomers to the SMB market where total cost of ownership and ease of deployment are key and where most sales flow through value-added reseller partners, not the direct sales forces that Oracle and SAP are accustomed to relying on.

The entry of Oracle and SAP into the SMB space has set off a scramble to find and sign qualified reseller partners. “All of the vendors are putting on a full court press to sign the best resellers,

As it continues to make acquisitions, can Oracle meld all of its applications under Project Fusion and meet its self-imposed deadline of 2008?

poaching resellers from competitors wherever possible,” says Michael Crawford, a principal with ThoughtDigital LLC (New York), an Oracle mid-market reseller since 2000. ThoughtDigital has

Samsonite: SAP Scores With Domain Expertise

Seven years ago, executives at luggage manufacturer Samsonite learned an important lesson about selecting and implementing enterprise applications. In 1998, the company decided to deploy JD Edwards’ World suite in its North American operations, replacing a series of homegrown applications. It turned out, however, that the JD Edwards applications lacked key order allocation, sourcing and other functionality required by Samsonite. So the company had to make major modifications. The result was predictable: delays and frustration.

“It was disastrous,” says Nick Macera, Samsonite’s CIO (who was in operations at Samsonite at the time). “If you look at the top 10 things you’re not supposed to do on an enterprise applications deployment, we did most of them.”

Two years ago, when Samsonite decided to take another look at a major enterprise applications rollout as part of a global process standardization initiative, the company was determined to do things differently. Specifically, the company wanted to avoid modifications, relying on out-of-the-box software for as much functionality as possible.

With the help of the North Highland Co., Samsonite detailed its requirements and defined the core global business processes that the applications needed to support. The company assembled those into 30 end-to-end business scenarios. Samsonite then scheduled a series of product demonstrations for prospective software vendors, requiring them to demonstrate the

ability to support 12 of those detailed process descriptions.

That detailed functional evaluation — along with Samsonite’s need for global support — quickly eliminated all but three vendors: SAP, Oracle and PeopleSoft (prior to the Oracle acquisition). When various panels of users across the U.S. and Europe were asked to score the products, SAP won a significant victory, largely thanks to retail-specific functionality — called the Apparel and Footwear Solution (AFS) that had been baked into the SAP solution.

“The scoring would have been a lot closer if you took AFS out of the SAP solution,” says Macera. “But SAP’s product was integrated in the retail arena. Oracle had an interface to the Retek product [since acquired by Oracle], but it was not really integrated.”

Oracle’s product did outscore SAP in some areas including ease of implementation, business intelligence and support for a single data model. But, says Macera, “when you got down to it, SAP had a depth of functionality in areas like distribution that could not be demonstrated in Oracle.”

Samsonite’s selection was covered by SAP’s Safe Passage program, which offers financial benefits to users of Oracle applications switching to SAP. That program, however, played only a small role in Samsonite’s selection, says Macera.

Samsonite’s two-phase deployment of SAP is scheduled to wrap up in April of 2007.

stuck with Oracle, says Crawford, because reselling mid-market-focused E-Business Suite Special Edition has made his company a lot of money. The company's Oracle practice has increased in size by eight times in the past two years. The company now employs 100 Oracle applications consultants. SAP and Oracle, as is to be expected, are taking different approaches to attracting mid-market reseller partners. SAP's approach, characteristically, is more deliberate, more hands-on and more vertically-focused. SAP, says Rodney Seligmann, the chief operating officer and senior vice president of the company's mid-market business, is hand-picking reseller partners for its All-In-One application suite based on their vertical industry knowledge. That approach goes hand-in-hand with industry-specific configurations of the All-In-One line, which, SAP says, embodies industry best practices and can be deployed in 15 weeks or less.

SAP also takes a hands-on approach to overseeing All-In-One deployments. Each All-In-One engagement has an SAP sponsor who, along with representatives from the reseller partner, sits in on the client's steering committee for the project. SAP also performs a benefits analysis.

"We don't take 100 percent ownership of the project, but we are accountable for its success," says Seligmann. The approach seems to be paying off. In its most recent financial report, SAP said it has seen a 23-percent increase in the number of signed deals, mostly through its indirect distribution channel.

Oracle, on the other hand, has been more focused on beefing up the raw number of resellers carrying its products, both by retaining resellers of its JD Edwards applications and signing on new partners. Oracle so far has been fairly successful hanging on to JDE resellers despite the acquisition turmoil, analysts say. The company has managed to resign key reseller partners such as CD Group Inc. (Norcross, GA) and Corning Data Services (Cranberry, PA).

In order to beef up the number of resellers for its E-Business Suite Special Edition product, Oracle is pioneering a two-tier distribution strategy in which much of the marketing, support and consulting will be provided to VARs by distributors. Oracle recently announced an agreement with distributor Avnet Technology Solutions under which the \$12 billion company will work with some of its 2,000 VAR partners to help them become resellers of the JD Ed-

wards and E-Business Suite Special Edition products. Avnet will provide to resellers much of the training, support and consulting traditionally provided by the software vendor.

"We need Avnet because we can't grow our distribution network quickly enough on our own," says Philip Hodson, Oracle's director of strategy. The program has no vertical industry focus, according to Avnet officials. Instead, the company is emphasizing quick, low-cost deployments. According to ThoughtDigital's Crawford, Oracle's Accelerator rapid implementation tools allow resellers like him to configure and deploy applications for mid-size companies in as little as seven weeks.

That focus on reducing deployment costs may, in the long run, favor Oracle, says Manufacturing Insights' Parker. "Oracle will get the budget-motivated upper mid-market accounts, while SAP will get those looking for a longer-term fit," says Parker. "That means Oracle has a better long-term opportunity to capture more of the market."

Both SAP and Oracle have aggressive growth plans for the SMB market. But can either of the giants really create affinity with smaller companies?

✓PARTNER STRATEGY

The great enterprise applications race isn't just between Oracle and SAP. It's between SAP's partner ecosystem and Oracle's partner ecosystem. Both vendors realize that, as manufacturers increasingly demand applications with deep, vertical industry functionality, it will become critical for them to be able to attract independent software vendor (ISV) partners who can provide that industry knowledge and industry-focused software. These partners must be willing to invest significant sums in integrating their solutions with the SAP or Oracle applications. That means they must be convinced of two things: That a significant market for their products exists within either the SAP or Oracle customer base and that the middleware tools that SAP or Oracle provides to accomplish the integration are robust enough for the job. In con-

NCH: Oracle Scores With Flexibility

It's not a huge surprise that, after finally biting the bullet and launching a search for a packaged suite of enterprise applications to replace its aging, homegrown systems, officials at NCH Corp. (Irving, TX) three years ago quickly narrowed their list of potential suppliers from 14 to two: SAP and Oracle.

As a maker of specialty chemicals, NCH needed an enterprise suite that had support for process manufacturing. But NCH also sells consumer goods to big-box retailers like Home Depot, so the company also needed application support for a wide range of discrete manufacturing processes. The company put together scripts describing 20 of its key processes and gave vendors three days each to demonstrate that they could support them. "Only four could really come close," says Bruce Weinberg, CIO at NCH. "And, after we did reference checks and looked at vendor financials, it really just boiled down to SAP and Oracle."

NCH's functional evaluation of modules from each vendor — manufacturing, distribution, warehouse management, general ledger, HR, transportation, CRM and procurement — ended in a near dead heat. "We

scored them on a 100-point scale, and they were within two or three points of each other," says Weinberg.

NCH ended up going with Oracle for two primary reasons: perceived flexibility and the depth of the Oracle labor pool, says Weinberg. In Oracle's pre-defined workflows and forms-based tools, NCH saw an opportunity to easily modify E-Business Suite applications where necessary. NCH, for example, used those tools to enhance E-Business Suite's support for material safety data sheets, a capability critical to chemical manufacturers.

"We saw Oracle as more flexible," says Weinberg. "We wanted to be able to make the applications work the way we work. We didn't want to give up what makes NCH NCH."

NCH also concluded that E-Business Suite experts would be more plentiful — and less expensive — than those familiar with SAP's applications. "We put identical ads on Monster.com for Oracle and SAP consultants," says Weinberg. "We got 18 SAP responses and 200 Oracle responses." NCH is now in the middle of rolling out E-Business Suite across its plants, having deployed the general ledger module in May.

vincing ISVs to join their ecosystems, SAP and Oracle face significantly different challenges.

Oracle, for example, has no shortage of ISV partners who are more than willing to build their products around the company's software infrastructure such as Oracle's market-leading database management system or its application server. Of Oracle's 15,000 partners, 7,200 fall into that category, according to Doug Kennedy, the company's vice president of global alliances and channels.

In the end, the great enterprise applications race is about enabling manufacturers to operate and compete more effectively on the global stage.

Historically, however, Oracle has struggled convincing ISVs to take the next step and invest in tightly integrating their applications with Oracle's. Today, only 200 of Oracle's partners have certified integrations between their applications and Oracle's.

"Oracle has an enormous developer partner network around its core technology, but they've never really tried to harness that for

but also to develop cooperative marketing programs.

That kind of focused and involved approach to partnering with ISVs would be a big improvement for Oracle, says Manufacturing Insights' Parker. In the past, he says, Oracle's approach to its ISV partners was a bit like "herding cats. They had a list of partners who could help on a given project, but they often weren't very clear on who was the best ISV partner for you if, say, you were a high-tech router manufacturer in need of a procurement-side solution."

But some potential partners are still wary about making the switch to linking up with Oracle on the applications side. PLM vendor Agile Software Corp. (San Jose, CA), for example, is an active Oracle partner on the infrastructure side, integrating Oracle's application server into its product offerings. The company, however, has stopped short of partnering with Oracle on applications, particularly since Oracle's acquisition of PeopleSoft, which Agile sees as a competitor.

"We find ourselves in a position where we can partner with Oracle on the technology side, but we have to put a wall up and be careful in how we get involved in the applications side," says Chris Wong, Agile's executive vice president and chief product officer.

SAP's task in constructing a winning partner ecosystem is, in a sense, even more challenging than Oracle's. That's because, unlike Oracle, SAP doesn't start with a deep bench of developer partners who are already working with its NetWeaver infrastructure technologies. So SAP must convince ISV partners not only that it is capable of constructive co-operation, but that NetWeaver is an investment-worthy platform.

SAP has a mixed reputation to overcome, say potential partners. "SAP has not had a good partner program in the past," says Wong. "They weren't very open, and they tended to compete with partners at the drop of a hat."

SAP is certainly trying to change that perception. Over the past year, SAP has held forum meetings with partners and the venture capital community in an attempt to drum up support for NetWeaver. The company, says Graf, has attempted to more clearly define in what product areas it plans to compete itself, and where partners have a chance to play. And, says Graf, SAP has been closely collaborating with ISV partners on the ESA process definitions that, ultimately, partners will use to integrate their products with those of SAP.

SAP's new approach to partner-building is beginning to pay off. The company recently announced that 522 ISVs have either had their products certified as integrated with SAP applications or actually integrated NetWeaver components into their offerings. One of those is Wonderware, which uses both SAP's Exchange Infrastructure and Portal products to integrate Wonderware's MES system with MySAP ERP. The partnership, says Wonderware's Abildgren, has enabled Wonderware and SAP to work together on 10 plant floor-to-ERP integration projects.

But has the partnership resulted in broader access for Wonderware to SAP's vast customer base? Not exactly, says Abildgren. "There are still a lot of SAP's sales folks in the field who do not share this partnership idea," says Abildgren. "There is still a lot of education that needs to be done."

taking the measure

ORACLE AND SAP BY THE NUMBERS

	ORACLE	SAP
• Founded	1977	1972
• Total revenue	\$11.8 billion(1)	\$10.2 billion(2)
• Application-related revenue	\$3.58 billion(3)	\$10.2 billion
• Employees	53,000	35,000
• Number of application customers	26,000	29,800
• Number of application reseller partners	240	1,600
• Number of application ISV partners*	200	522
• Number of employees devoted to applications R&D	8,000	11,132

(1) For the fiscal 2005 period ending May 31, 2005

(2) For the fiscal 2004 period ending December 31, 2004

(3) Reported as non-GAAP results

* Partners that have integrated their solutions with Oracle or SAP applications

Source: Oracle and SAP

applications," says AMR's Shepherd. "That's starting to change, however. They're on a campaign to get more ISVs to buy into Fusion Middleware and to be able to differentiate partners who are Oracle technology partners from those who are using the technology to build applications that are compatible with Oracle's."

In order to attract more ISV partners, Oracle is expanding its longstanding Cooperating Application Interface initiative, which was an effort to publish interfaces to Oracle applications and encourage ISVs to use them. Now, says Kennedy, Oracle is making a more concerted effort to scope out specifically what vertical industry functionality it will look to ISV partners to provide. And, he says, Oracle is working with ISVs whose products match that functionality to not only ensure they integrate with Oracle's applications

making choices

SAP MAY BE A BETTER CHOICE FOR YOU IF:

- You need vertical industry-specific functionality that is supported by SAP
- Process innovation and integration are key to your business strategy
- You require standards-based integration between your ERP and existing commercial MES systems

ORACLE MAY BE A BETTER CHOICE FOR YOU IF:

- An easier, lower-cost deployment is high on your list of priorities
- Real time business intelligence is key to your business strategy
- You need tightly-integrated, out-of-the-box ERP and MES functionality

✓ LEADERSHIP

Many large companies, upon seeing a rival grow through a series of high profile acquisitions, would be sorely tempted to engineer a few takeovers of its own. Not SAP. With perhaps the deepest management lineup in the enterprise applications market, forged by 30 years of intense focus on applications, SAP is not about to be diverted from what it sees as its mission, officials say.

"The reason Oracle will fail [in its efforts to challenge SAP] is that we will remain obsessed with enabling every company to become a best-run business," says SAP America CEO McDermott. "We will not get distracted by marketing hype or tactics coming out of Oracle."

The focus and experience of its management team has historically served SAP in good stead. "SAP's leaders understand the market," says AMR's Shepherd. "They understand it in terms of the technology, the processes and the motivations of the customers. That's enabled them to execute extremely well over the years in terms of product, support, even marketing. It may be the first case in history where an American company has been outmarketed by a German company."

Bruce Weinberg, chief information officer at NCH, says the decision to go with Oracle was based on flexibility, but it was razor thin on points.

The real question is whether Oracle, from the various companies it has acquired, can assemble a leadership team capable of taking on SAP and delivering what customers want. For one thing, unlike SAP, which has prospered under a fairly stable leadership team, Oracle has historically operated under a continually changing set of managers under CEO Ellison. The latest example: the recent resignation of Oracle CFO Gregory Maffei after only six months on the job.

There have certainly been doubters, chief among them users of JD Edwards and PeopleSoft applications who, following the takeover of those companies by Oracle, wondered if the company's management would simply milk the installed bases of those vendors for maintenance revenue or try to hold onto customers by investing in the applications.

"Going into this deal, we were concerned that Oracle would treat the JD Edwards EnterpriseOne product as a dead product. Larry Ellison had made some noises about that early on," says Larry Jones, a software developer for Wagstaff Inc. (Spokane, WA), a maker of

metal castings and machinery. "But we've grown a bit more upbeat with time. Oracle has put work into the product line, and it's now being sold by some major partners, so we're encouraged."

Indeed, since taking over PeopleSoft, Oracle under the leadership of Wookey and president Charles Phillips has gone out of its way to reassure JD Edwards and PeopleSoft customers that their applications will continue to be extended and supported and that they will not be forced to migrate to Oracle's next-generation Project Fusion product but allowed to do so at their own pace. At the recent Oracle OpenWorld user conference, for example, the company announced optional lifetime support for existing JD Edwards and PeopleSoft applications, extending the earlier commitment to support those products for five years. Oracle also announced that current releases of the JD Edwards and PeopleSoft product lines will be retrofitted to support the company's Fusion Middleware products. That followed new releases of the JD Edwards product and the SRM module of the PeopleSoft product line.

While some EnterpriseOne customers have squirmed at what they call Oracle pressure for them to adopt Oracle's middleware products, many say they have been pleased with the level of support and with Oracle's commitment to their existing products.

"Sometimes Oracle is perceived as a big, tough company, but people are often surprised at how customer-centric we can be," says Wookey. "What we are trying to do is create a situation where customers see continual progress in the products they're running today but know that, at the point when it becomes important for them to move to a real component-based version of the products they have, that that will be available to them. But they will drive the timing of the transition."

✓ THE FINISH LINE

So, in the battle of enterprise application titans, who will win? Can Oracle hang onto existing customers and execute its Project Fusion product strategy, its SMB strategy and its partnering strategy well enough and quickly enough to mount a credible challenge to SAP? Or is the market leader's momentum too strong to be overcome?

The smart money, say experts, must be on SAP. "SAP has the market share, and I don't see anything that makes me think they are going to stop executing well," says AMR's Shepherd. "Oracle faces a very difficult time closing the gap. They've proven they can do acquisitions. But they haven't yet shown they can outgrow SAP organically in the way they would need to in order to catch them."

Indeed, Oracle isn't close to matching SAP in terms of organic growth. While SAP grew software revenues by 20% in its most recent quarter compared to the like period a year earlier, Oracle's most recent fiscal quarter saw a 64-percent drop in new software license revenue compared to the prior quarter. In 2004, Oracle and PeopleSoft together claimed 22% of the enterprise applications market by revenue, according to AMR. This year, that figure is expected to slip to 19%, while SAP's share is projected to grow from 40% to 43%.

Still, Oracle officials insist their goal is nothing less than overtaking and replacing SAP as the enterprise applications leader. They admit, however, that it's going to take time.

"We think, in the next three to five years, this can become a highly competitive market, where people can really start to question who is the leader in applications," says Wookey. "We want to be in a position where it becomes a debate over who the leader is." Consider the debate opened. ■