A Buyer's Market for Software

by **Christopher Trunk**, *managing editor*

While there's a mix of good and bad news for the manufacturing and warehouse management system (WMS) software markets, vendors and industry analysts predict conservative, positive sales growth. Increased competition among vendors and more advanced functions mean good news for buyers.

"There's a lot of pressure on license fees, and it's a buyer's market for WMS due to the tough economy and tough competition among vendors. There are a lot of great deals to be had out there," says Scott Rishel, vice president, business development for irista. That's common knowledge among the vendors contacted for this report. Some companies are pushing software leasing as a way to entice buyers with tight-fisted approaches to capital goods purchases, and other vendors find no sense in leasing software over purchasing it.

Here is an overview of what some software vendors see as the state of the software industry today.

Chris Heim, CEO of HighJump Software. We're cautiously optimistic about the WMS marketplace because of its proven, short payback period. Prices have come down so that Tier 2 and Tier 3 companies can afford WMS. I recommend that potential buyers take a look at recent WMS prices if they think they couldn't afford it in the past. Managers can go to their CFOs with a WMS project and likely get approval because efficiency and improved customer service gains have concrete numbers to back them up.

There's been a shift of driving value-added activity back to suppliers — everything from garment-on-hanger to compliance labeling to pre-tagging. There have been RFID trails, but most users see RFID to be four to five years out until it's widespread.

Marc Wulfraat, managing partner, KOM International, a consulting firm. The WMS market has been soft since 2000 with few vendors posting profits, particularly in North America. Most vendors have survived the past three years by upgrading software with existing accounts and with feature enhancements. New deals have been slim, and competition is fierce for these new customers. The market in general is oversupplied given current demand, and I predict tough times ahead resulting in increased market consolidation. That's why it's essential to evaluate a WMS vendor's financial viability.

Prospective WMS buyers should:
- Expect vendors to negotiate on software license fees;
- Expect vendors to protect service revenue and gross margin on services. Negotiate these and tie them to deliverables;
- Investigate the financial health of vendors;
- Avoid being pressured into decisions based on vendor-imposed deadlines. Those big savings will be there tomorrow.

Prashant Bhatia, director of product management for Manhattan As-

WMS Moves in on Manufacturing Sites

Scott Rishel, vice president, business development for irista, says there are untapped opportunities for applying warehouse management systems (WMS) to manufacturing. Manufacturers face questions like how do I handle and move raw material from receiving and storage into the production line. "It's a different paradigm from pick, packing and finishing goods, and efficiency is a major issue for WMS as well as security around bringing the right product to the right line involving the right person authorized to make that inventory move," says Rishel.

This traceability of the flow of raw material through the manufacturing process used to be a paper-based system, but WMS can do the job more accurately and with improved tracing.

Rishel reports that other WMS vendors are seeing this opportunity, but it's not as simple as applying a WMS to a manufacturing site. It requires recoding the WMS to add the concept of work orders. Then there's the concept of replenishment that's different for the production line. You'll have some leftover material, and you need to easily receive that leftover raw material back into inventory. On the positive side, there seems to be a lot more market acceptance for WMS in the manufacturing site than before.

This high-tech electronics manufacturer uses irista warehouse software to track and control the flow of components and finished products. The WMS improves the accuracy and efficiency of the manufacturer's production and distribution operations.

Big Changes for Bar Coding

There are new bar code reader capabilities and passive ID tags and active ID tags that call for greater read capability and a lot more condensed information. All your bar code label modules in WMS packages are being changed or will be changed by the end of 2003, says Paul O'Connell, president and CEO of Operations Concepts, Inc.

The European Uniform Code Council, the U.S. Uniform Code Counsel as well as Procter & Gamble and UniLever are creating a universal tag that can be used in CHEP pallet return programs as well as used outside of a finished goods box to travel from cradle to grave.

Currently, the UPC on a finished product can't be used on the master case or carton. There's a drive now to standardize on all master case bar code labels so you can get all the data on case contents as well. The standardization of these master case bar codes is being driven so that existing bar code scanners can read them without any specialized labeling — to put the data directly into the customer's business. Today, a lot of interfaces are required to make that happen.

We see a reduction in the need for interface software packages as well as uniform use and coordination of existing bar code scanning equipment and readers. This will increase productivity on shipping and receiving docks.
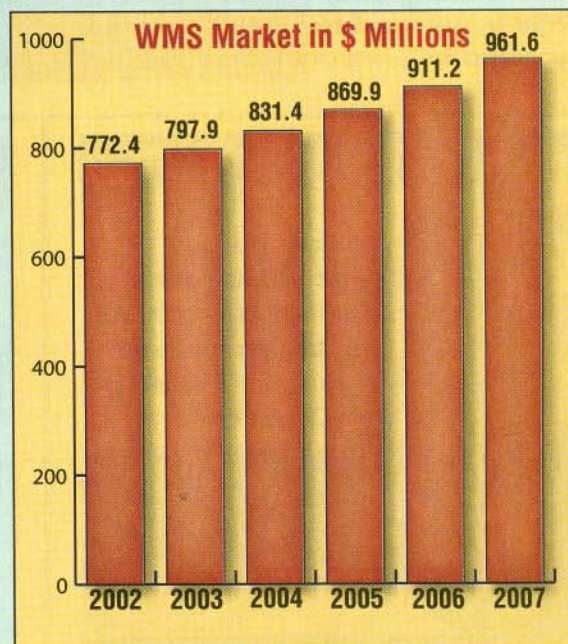
There's a drive toward new bar code standards for pharmaceutical products as well so that barcodes can be applied during packaging and then be read at the pharmacy, hospital or doctor's office where dosages are administered. The bar code label will verify the right drug and the right dosage. This will mean installing bar code scanners at pharmacies, doctors' offices and hospitals, which means huge sales for bar code scanner vendors and for those that provide interface software between the scanners and the host systems.

sociates. In the first quarter of 2003, the number of clients looking for WMS is back on track for Tier 1, 2 and 3. The number of prospects for Tier 3 sales has increased significantly over the past six months.

RFID will be a huge change driven by major retailers, high-tech and pharmaceutical manufacturers. Manhattan will make all of its WMS packages RFID-capable in Q1 of 2004. In the next 18 months, RFID will develop standards and prices will decrease as buyers come to understand its benefits. There are rumors that Wal-Mart will force all vendors into RFID tags by 2005/2006.

Joel Stachowski, senior account manager for Lilly Software Associates. There's more aggressive discounting of WMS licensing fees. But if vendors are discounting the price of their software, they still need to maintain low implementation costs. In years past there was a range of implementation-cost-to-software-fee ratios of from 3:1 to 5:1. This all means that WMS vendors need a more standardized approach to installing WMS so the ratio can be closer to 1:1 or lower for 2003

WMS Market in $ Millions
- 2002: 772.4
- 2003: 797.9
- 2004: 831.4
- 2005: 869.9
- 2006: 911.2
- 2007: 961.6

WMS Forecast

The warehouse management systems market grew by close to five percent in 2002, which represents a significant recovery. Between 2000 and 2001, WMS sales worldwide shrank by six percent, while in North America they shrank by almost 12 percent. The bounce back in revenues this year is not a harbinger of fast future growth. The ARC Advisory Group forecasts a growth rate of under five percent for the coming five years. Source: Steve Banker, service director, supply. SOURCE: ARC ADVISORY GROUP

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and beyond.

There are Tier 1 and Tier 2 WMS vendors in precarious financial situations. Without a strong 2003, some companies will go under or be acquired by other vendors. Buyers must look at long-term financial viability of their vendor. Be wary of vendors whose CEOs, sales staffs and executive teams have turned over. Marketing messages from vendors won't always tell you the health of an organization, so look to Dunn and Bradstreet reports.

Paul O'Connell, president and CEO of Operations Concepts, Inc., a systems integration and industrial engineering firm. We'll see growth in Tier 1 "light" packages in which a full-blown WMS has a lot of its WMS functions or modules stripped out or turned off. These "light" Tier 1 packages are aimed at small to mid-size firms.

By the way, if you shop for a WMS package without a written specification and decide based on a Power Point presentation from a salesperson, shame on you. The same shame goes for WMS vendors selling software without a written spec or operational analysis.

James Mallory, product marketing manager for Best Software. The market for manufacturing software is pretty good, and certain industries are doing better, including pharmaceutical, high-tech, electronics, electrical equipment and computers. Lease-to-own manufacturing software is very popular. The market is not great, but we are focusing on moving our existing customers into more sophisticated software without losing their data. One-third of our new name MAS 90 software accounts came from our more basic Peachtree accounts last year. We've also approached strategic vertical and niche industries. These industries are looking for specific software to help them

manage their businesses better.

Art Fleischer, sales and marketing manager, warehouse management group for Ann Arbor Computer, a division of Jervis B. Webb. The economy seems to be holding back a lot of decisions to move forward on WMS purchases. Buyers aren't canceling their projects; it's rather they're being conservative on where and if they'll be spending money. We continue to see WMS vendors being bought up or forming alliance partners with one another to increase sales. The end user will benefit with a stronger remaining stable of WMS vendors after all these slowdowns like Y2K, 9-11 and now the Iraq war.

We're looking at packaging our

Understanding Implementation Cost

Joel Stachowski, senior account manager for Lilly Software Associates says that implementation costs include implementation cost before, during and after software install. Specifically, it can entail:

Software installation onto the server at your location;

Process consulting, including how well the current software processes are flowing. If a customer wants to remap its warehouse, he suggests hiring an outside process consultant;

Training;

Implementation and configuration support. This means setting up the warehouse inside the software program and inputting physical storage locations into the WMS and configuring the software to the way the warehouse handles, receives and picks orders. Add to this bar coding and placarding physical warehouse storage locations. It includes RF network setup.

Go-live support;

Post go-live support.

pcAIM software along with a larger list of products from Jervis B. Webb. Webb is looking to ally with vendors of lighter-duty conveyor and carousel systems to offer them under the Webb name. The strategy is the customer might be more comfortable with a vendor if it can provide a single-package solution.

Stephen Legg, president of Real Time Solutions, an FKI Logistex company. We offer a warehouse control system (WCS) that works one level below a WMS to coordinate order fulfillment activity using A-frames, carousels, pick-to-light, voice, RF handheld units and automatic labeling systems. In 2003 WCS will have a good, healthy year with

Sources

The following contributed to this report:
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ARC Advisory Group, www.arcweb.com
Best Software, www.bestsoftware.com
HighJump Software, www.highjumpsoftware.com
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Lilly Software Associates, www.lillysoftware.com
Manhattan Associates, www.manh.com
Operations Concepts, www.operationsconcepts.com
Real Time Solutions, an FKI Logistex member company, www.fkilogistex.com/realtime or www.picktolight.com
SK Daifuku Corporation, www.skdaifuku.com

the direct payback being linked to coordinating mechanized and manual handling systems. Though we offer a standardized and modular product, the end result is customized to each site due to varying physical layouts, different machinery and order volumes. One of the reasons why WCS is healthy is because it can be added onto an existing WMS to get more productivity out of automated equipment, and the WCS is available on the buyer's computer platform and database server for easier maintenance.

We recently studied computer platforms, and most users had adopted Windows as a platform. A small percentage were using Linux or AS400 with some using UNIX. Major retailers are almost exclusively using UNIX across multiple states.

David Koch, president of SK Daifuku Corporation. I think the WMS software marketplace is more healthy for 2003 than the material handling equipment side or distribution centers are. WMS is something that a company can implement relatively quickly, at a reasonable price and get a fair amount of benefit from immediately by improving overall manufacturing and distribution operations. And we see WMS being used as a company's first phase in a strategic plan with other improvements coming later.

We see a general trend in software packages with more features, running on new computer platforms and being offered at the same price or maybe even driving the price down — but generally same price, more functions.

Major retailers are looking for best-of-class software for a particular function and expecting it to fit the overall corporate computer architecture and communicate between existing software packages. New software must talk both up-

stream and downstream through the entire supply chain.

I think all WMS vendors have had to put the brakes on software research and development into market areas where they were weak in the past, but overall, the market is weathering the storm. We're focusing on our core strengths, and we had to reconsider our own initiative plans. Our strengths are more fully automated facilities with AS/RS, carousels, pick-to-light and conveyor sortation systems.

We're moving into a JAVA-based, object-oriented computer platform. Long term benefits include easier future

New Trend in "Virtual Manufacturing"

James Mallory, product marketing manager for Best Software finds a lot of companies are outsourcing their manufacturing overseas. They do some manufacturing in the states, ship product overseas for value-added work and then receive goods back into their U.S. plants or ship it. Then there are companies that outsource their entire manufacturing process and then manage the distribution.

"We call this 'virtual manufacturing,'" says Mallory. "Companies still need to manage the production supply chain to plan lead time for production as well as plan for the cost of processing and tariffs overseas, need to schedule the receipt of goods back into the states and be aware of any additional work that must be done." This process can get complicated when it takes several weeks or months to ship product overseas and back.

Best Software has added new modules to handle these operations. It's popular in many industries to ship a vendor 1,000 parts for value-added work. The vendor completes work on 200 items at a time and ships them back in lots to the manufacturer. "It's critical for the manufacturer to not lose visibility of the product when it's broken into several shipments," adds Mallory.

Mexico was a popular destination for manufacturing overseas, but now China and Asia have the lowest labor rates. "It's a sad truth, but manufacturers can sell goods a lot cheaper if they ship their products overseas for value-added manufacturing," observes Mallory.

modifications and upgrades. We're also taking into account the JAVA-based labor pool of programmers coming out of college.

Scott Rishel, vice president, business development for irista. We see flat to moderate growth for WMS in the rest of 2003 for the market as a whole. Though there's quite a need for warehouse technology, money is still pretty hard to shake free from these companies. Regarding the ARC Advisory Group's estimate of a five percent growth for WMS in coming years, I see that as a conservative number, more likely five to 10 percent. I'd be extremely shocked if the industry turned 15 to 20 percent this year. But we are expecting about 15 percent growth for our WMS business in this and next year.

There's been a lot of talk about RFID, but in 2003 it will be a lot more buzz than reality. As channel masters like Wal-Mart figure out how to use RFID, they may dictate to suppliers that instead of compliance labels with bar codes, a compliant RFID tag would replace labels on the outside of the box. This proba won't happen in 2004. **MHM**