Top 20 Supply Chain Management software providers

Your job has changed and so have we. This year, Modern Materials Handling © offers its first ever look at the top providers of supply chain management systems.

By Bob Trebilcock, Editor at Large -- Modern Materials Handling, 5/1/2007

The worldwide market for supply chain management (SCM) software topped an estimated \$6 billion last year, and is expected to reach or exceed \$8 billion by 2010, according to the most current estimates from AMR Research (617-542-6600) and ARC Advisory Group (781-471-1000).

That's a segment that includes supply chain planning (SCP) applications as well as supply chain execution systems including transportation management (TMS), warehouse management (WMS), and manufacturing execution (MES).

The upsurge marks a significant rebound from recent years, when the SCM market was merely keeping pace with inflation. AMR estimates that spending on SCM solutions increased by 7% last year, up from an increase of just 3% in 2005. And ARC sees the market growing at a compound annual growth rate of 8.6% through 2010.

Leading the top 20 list of providers are three Enterprise Resource Planning (ERP) vendors, SAP at \$735 million, Oracle at \$585 million, and Infor at \$348 million. Others include two best-of-breed suppliers, Manhattan Associates with \$289 million and i2 Technologies with \$280 million, both providers of supply chain planning and execution solutions.

Driving that growth, according to John Fontanella, AMR's vice president of research, is the need to manage complex, global supply chains that include a mix of global suppliers, contract manufacturers as well as company-owned plants, third-party logistics providers and a network of transportation providers.

In fact, AMR's research found that the typical U.S. manufacturer is managing on average more than 30 contract relationships. Supply chain management solutions allow enterprises to handle that complexity while still responding to increasingly demanding customers.

New direction

Listing the top 20 SCM providers marks a new direction for Modern's annual look at the top providers of execution and planning software. In 2001, the first year we surveyed the industry, our focus was on top providers of warehouse management systems (WMS) in North America. The focus shifted slightly to supply chain execution providers with last year's list.

Supply chain execution and warehouse management reflected our readers' interests and responsibilities at the time. Manufacturing and distribution processes had taken place primarily inside the four walls and were managed by people whose view of their business was restricted to those facilities. And what went on in facilities was often not reported to the enterprise at the end of the day, or even at the end of the week.

Today, manufacturing plants and distribution centers are at the center of global businesses, and not an afterthought. How well a company manages its supply chain processes can determine its market position. And, products that used to be manufactured from start to finish in one plant, now may begin the process in one location, travel to another for further assembly, and be finalized in yet a third facility.

For proof, look no further than recent stories from Modern about Sun Microsystems , Delphi and C.R. Bard. Each relies on sophisticated supply chain management solutions to manage processes that span not just multiple factories and distribution centers, but multiple countries.

Our readers' titles and responsibilities have changed, too—with more supply chain and logistics titles than ever. And as business goes global, so have our Web readers, with a significant portion coming from outside the United States. Finally, not only have our readers broadened their outlook and responsibilities, so have the suppliers of supply chain solutions.

For example, in 2001 Manhattan Associates was the No. 1 provider of warehouse management systems, with just more than \$100 million in revenue. Today, Manhattan is a nearly \$300 million company, offering transportation management, supplier collaboration and supply chain planning.

Meanwhile, RedPrairie, the next largest best-of-breed provider of warehouse management systems with \$189 million in revenue last year, also offers just-in-time, just-in-sequence manufacturing solutions and applications to plan, schedule and manage labor inside big box retail stores. Limiting the list to WMS providers no longer reflects the world of supply chain software.

The criteria

To make the list this year, a company had to meet the following criteria. It must supply more than one of the major categories of supply chain management software—planning solutions along with WMS, TMS and MES execution systems. That's why a company like Dematic, which only provides warehouse management systems, is on our list of top supply chain execution providers (p. 51) but not on the "Top 20 supply chain management providers" (p. 49) list despite software revenues of \$60 million. All rankings are determined by worldwide revenue numbers.

Here's a look at the leading trends in each of the prime categories for supply chain management.

ERP Systems

Last year saw a continuation of the consolidation in the supply chain management and planning space, according to Fontanella. This trend was best illustrated by the purchase of Provia Software by SSA Global, only to see SSA swallowed up by Infor, now the third-largest ERP provider.

Last year also saw JDA Software, No. 6 on the list with \$277 million in combined revenue, purchase Manugistics.

"The ERP companies have re-asserted themselves in the supply chain market," says Fontanella. "But consolidation doesn't mean we'll be lacking for innovation because new companies continually pop up in this field with new approaches."

Fontanella has noticed two trends in the ERP companies that top our list.

- 1) While CIO's would like to standardize applications under one application vendor, Fontanella says "companies recognize that there's a certain amount of risk to building your whole application portfolio around one vendor." At the same time, Fontanella says he's seeing ERP vendors like Infor and Oracle compete with best-of-breed providers in areas where they have deep functionality in an application.
- 2) Fontanella sees an opportunity for providers of multi-enterprise collaborative platforms that link trading partners together to make their presence felt in the market. "With the emphasis on doing business globally, there's an opportunity for collaborative commerce if companies can implement a solution and begin to get an ROI (return on investment)," says Fontanella. "If that happens, today's leaders will have to rethink how they approach the market."

Transportation Management Systems

The market for Transportation Management Systems (TMS) continues to grow at an accelerating pace, according to Adrian Gonzalez, director of the logistics executive council for ARC Advisory. "Last year, I forecasted that the market would grow at a compound annual growth rate of 6.9%, and when all the numbers are in, I believe we're going to find that it grew faster than that in 2006," says Gonzalez.

One of the biggest areas of growth is the on-demand market TMS. "On-demand TMS is now an estimated 33% of revenue for all of TMS, and over the next five years, two-thirds of the vendors expect that to be the fastest-growing segment of the market," Gonzalez says. In addition, Gonzalez says TMS suppliers are expanding their footprint, much as WMS providers have by adding solutions for global trade management, which facilitate international shipping and fleet management solutions like route management and scheduling.

"Historically, TMS has focused on providing solutions for large companies that tender their loads to common carriers," says Gonzalez. "Now, TMS providers are broadening their footprint and adding solutions for carriers that have their own fleets."

Warehouse Management Systems

Warehouses and distribution centers have evolved from storage facilities to order fulfillment engines. For that reason, the leading supply chain management companies are also leading providers of supply chain execution systems, including warehouse management (see table on pg. 5).

It's also one of the reasons that the WMS market is once again beating inflation, especially among the leaders. "For several years, I've been saying that WMS is a mature market growing at less than 5% a year," says Steve Banker, service director for supply chain management at ARC Advisory. "For most of the market, that's still true. But the top suppliers, like Manhattan Associates and RedPrairie, had double-digit growth."

What's going on? In part, it's a reflection that the biggest WMS companies are dominating, either through internal growth or by acquiring competitors. But there is also a growing market for new WMS solutions on the part of Tier 1 and large Tier 2 end users. "The last time the WMS market really grew was between 1995 and 2000," says Banker. "When you figure that a WMS system gets replaced after 10 or 11 years, you see we're in a replacement cycle that will last for another five years."

Banker also notes that ERP providers are making further inroads, especially among midtier companies looking for one vendor who can provide all of their business process applications. "I'm seeing mid-size ERP companies, like Epicor, have a real impact on the market," says Banker. "These are companies that wouldn't have been on my radar a few years ago."

Manufacturing execution systems

While MES has been around for years, the market for manufacturing systems is finally hitting on all cylinders, says Alison Smith, senior research analyst for AMR Research. "All of our corporate spending data shows that MES has finally reached the same strategic importance as ERP," says Smith. "And if you look just at ERP companies, you'll find that their manufacturing applications have surpassed all other categories that they offer."

Now that it's caught fire, the MES market, says Smith, will continue to grow at least until 2010 and possibly beyond. "All of our market models are showing a potential market of more than \$2 billion," says Smith. "We don't know who the winners will be, but there is plenty of untapped opportunity."

Driving that growth, says Smith, has been the need to get more control and flexibility over manufacturing operations, along with new regulatory requirements for more information about the raw materials, components and parts that went into a product, along with where and when the product was manufactured.

The single biggest trend Smith is tracking? "What we're seeing is essentially a decomposition of MES into core nuggets of functional components, like track and trace, in-process quality control, and product genealogy that can be implemented according to what a manufacturer needs," says Smith. "Not everyone needs the whole set of MES capabilities, and the expense and time it takes to implement a full system is what's impeded the growth of the market."

	Supplier	2006 revenue	Web site	SCP	WMS	MES/MRP	TMS
1	SAP	\$735 million *	www.sap.com	X	X	X	X
2	Oracle	\$585 million *	www.oracle.com	X	X	X	X
3	Infor	\$348 million **	www.infor.com	X	X	X	X
4	Manhattan Associates	\$289 million	www.manh.com	X	X		X
5	i2 Technologies	\$280 million	www.i2.com	X			X
6	JDA Software	\$278 million	www.jda.com	X			X
7	RedPrairie	\$189 million	www.redprairie.com		X	X	X
8	IBS	\$178 million	www.ibsus.com	X	X	X	X
9	Epicor	\$124 million	www.epicor.com	X	X		X
10	Aldata	\$99 million	www.aldata-solution.com	X	X		X
11	Swisslog	\$93 million ***	www.swisslog.com	X	X		X
12	HighJump	\$90 million	www.highjumpsoftware.com		X	X	X
13	Brooks Software (Applied Materials)	\$85 million	www.brookssoftware.com			X	
14	ClickCommerce	\$76	www.clickcommerce.com		X		X

	Supplier	2006 revenue	Web site	SCP	WMS	MES/MRP	TMS
		million					
15	Microsoft	\$72 million	www.microsoft.com	X		X	
16	QAD	\$67 million	www.qad.com	X	X	X	X
17	IFS	\$57 million	www.ifsworld.com/us	X		X	
18	Descartes Systems Group	\$46 million	www.descartes.com	X			X
19	Catalyst	\$41 million	www.catalystwms.com	X	X		X
20	Logility	\$37 million	www.logility.com	X	X		X

^{*} Industry estimate ** Combined Infor, SSA Global & Provia Software *** Swisslog - Industry estimate for WMS, WCS and supply chain planning

SCP: Supply chain planning WMS: Warehouse management system MES/MRP: Manufacturing execution system TMS: Transportation management system

	Vendor	2006 revenues	Web site
1	Manhattan Associates	\$289 million	www.manh.com
2	RedPrairie	\$189 million	www.redprairie.com
3	SAP	\$130 million *	www.SAP.com
4	Oracle	\$110 million **	www.oracle.com
5	Infor	\$102 million ***	www.infor.com
6	Aldata	\$99 million	www.aldata-solution.com
7	HighJump	\$90 million	www.highjump.com
8	Swisslog	\$70 million	www.swisslog.com
9	Knapp Logistik	\$63 million	www.knappusa.com
10	Dematic	\$60 million	www.dematic.com

^{*} Estimate based on growth over 2005 revenues

^{**} Estimate based on acquisition of G-Log

^{***} Estimate based on acquisition of SSA Global and Provia