READER SURVEY:
Materials handling software usage

WMS, SCMP, WCS, LMS and more—*Modern*'s readers offer insights into their use of software, from (alphabet) soup to nuts.

By **Sara Pearson Specter,** Editor at Large

Data, data everywhere! For companies in manufacturing, warehousing and distribution, there's no shortage of information available about products and processes throughout a facility. Indeed, it's widely accepted that the information about the movement of goods is every bit as important as the actual movement of those goods. The tricky part is harnessing that information to its fullest competitive advantage.

That's where software comes into play. Software implementations seek to address key challenges, including automation integration, labor optimization, billing, fleet management, accuracy improvement, inventory control and loss prevention, material synchronization, order prioritization and supply chain visibility.

Supply chain management and planning (SCMP), warehouse management systems (WMS), labor management software (LMS), warehouse control systems (WCS), asset tracking software, yard management software (YMS) and slotting optimization software all help users make sense of information collected by automatic data capture (ADC) technologies like bar code scanning, voice recognition and RFID.

In January, *Modern* readers were surveyed regarding their deployment of ADC technologies. As a companion to that study, we surveyed e-mail subscribers of *Modern* in May about their use of materials handling software. We received responses from 175

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Putting data to work in warehouse and distribution operations
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qualified readers—defined as someone personally involved in the use, evaluation or purchase of such software. Survey respondents represented 23 different industries, including industrial machinery, computers and electronics, chemicals and pharmaceuticals, and wholesale trade.

Nearly half (49%) of respondents described their companies as being cautious to embrace change when it comes to adoption of technology for materials handling procedures, with another 22% classifying their organizations as either innovators or early adopters. In light of the current economic climate, 37% are scrutinizing their current software investments and intend to spend with caution, while 30% are definitely investing in new software before the end of this year. Instead of buying new, 16% will upgrade existing systems while 20% are postponing their investment.

In the next 12 months, 54% indicate they'll spend less than $100,000 on software (including license, integration and training) and 39% plan to spend up to $1 million.

Here's what we learned across each of the major software categories.

Warehouse management software

A warehouse management system (WMS) controls the movement and storage of materials within a facility and processes the related transactions, such as shipping, receiving, putaway and picking. Because it is so ubiquitous, our survey indicates that WMS is the most-used software in a facility, with 60% of respondents currently using a WMS; 36% plan to evaluate, purchase or upgrade that software in the next two years.

On average, a WMS has been in use for 6.5 years, with upgrades typically occurring every 2.5 years. As for value, readers say it takes an average of 12.3 months to get a return on their WMS investment.

Companies are planning to buy a WMS in the next two years for a variety of reasons:

- 45% want to upgrade their existing package.
- 36% are seeking better labor management tools.
- 32% are looking for better inventory deployment.
- 30% want real-time control.
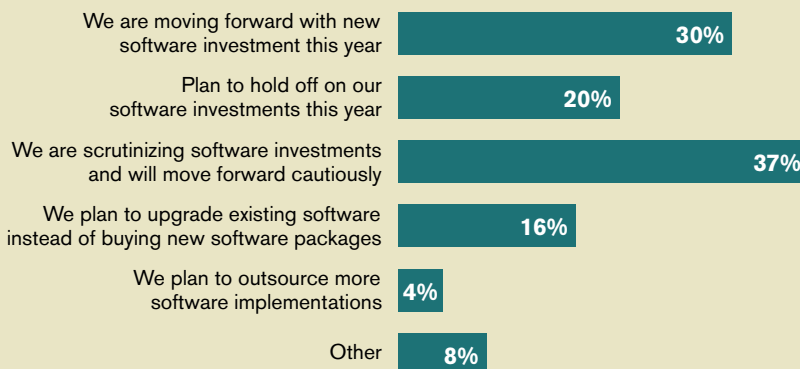
Supply chain management and planning

Supply chain management and planning (SCMP) software integrates supply chain transactions by managing relationships with both customers and suppliers while controlling related business processes. Functions managed include customer requirements, purchase orders, inventory, goods receipt, warehouse operations and supplier sourcing.

Just 34% of our survey respondents have SCMP software in place and 16% anticipate evaluating, purchasing or upgrading that software in the next 24 months. These users, on average, have had their SCMP system in place for 7.2 years and typically upgrade every 2.5 years. It takes a little more than 12 months to realize a return on investment in an SCMP system.

SCMP software is used for a variety of initiatives:

- Procurement, with 53% currently using SCMP and 26% planning to purchase or upgrade for that purpose.
- Inventory visibility, with 46% currently using SCMP and 33% planning to purchase or upgrade to better track their assets.
- Order management, with 46% currently using SCMP and 35% planning to purchase or upgrade to gain better control of orders.

How has the current economic climate changed your company's approach to adopting materials handling management software?

We are moving forward with new software investment this year	30%
Plan to hold off on our software investments this year	20%
We are scrutinizing software investments and will move forward cautiously	37%
We plan to upgrade existing software instead of buying new software packages	16%
We plan to outsource more software implementations	4%
Other	8%

Source: Peerless Media Research Group

- Demand planning, with 37% currently using SCMP and 24% planning to purchase or upgrade as a means to better predict trends.
- Other top initiatives include: Collaboration with vendors/suppliers (35% currently use/33% anticipated use) and manufacturing (30% currently use/19% anticipated use).

Warehouse control systems

A warehouse control system (WCS) handles real-time data management, while coordinating and directing the activity of a facility's multiple materials handling sub-systems (plus their monitoring, control and diagnostics). WCS is currently in 28% of respondents' facilities, with 19% planning to evaluate, purchase or upgrade such a system in the next two years. On average, WCS has been in use in our readers' facilities for 5.8 years, with upgrades occurring every two years. Most found it took 13 months to get the return on their WCS investment.

Of respondents' whose companies are planning to evaluate, upgrade or purchase a WCS, 68% will do so within the next year and 65% will be buying a brand new system. Notably, 59% indicate that their WCS purchase is an integral part of a larger automation initiative, while only 38% will implement a WCS as a stand-alone project. Most (62%) will be buying from a WCS software provider, as opposed to a systems integrator (14%) or an equipment manufacturer (10%).
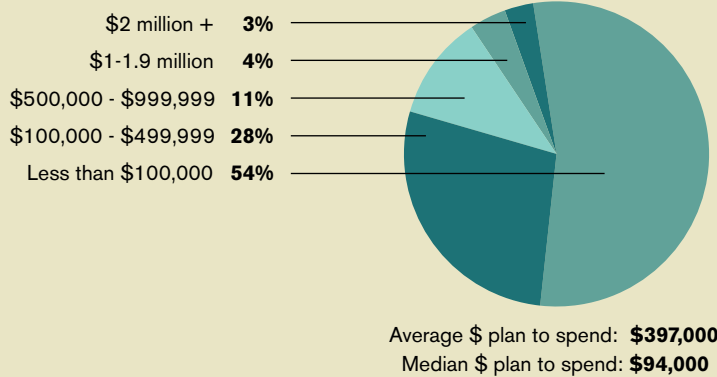
Other software

A little more than a quarter of respondents (26%) indicate they use asset tracking software to manage the assets used to move, store, secure, protect and control inventory both within their enterprise and throughout the supply chain. The software is relatively new in terms of use, with 80% of respondents having it in operation for 10 years or less. Asset tracking software had the fastest rate of return on investment, according to our readers—just 10 months.

Labor management software (LMS) is currently used by 23% of respondents to optimize workforce productivity through comparative reporting of direct and indirect labor use against both historic data and engineered standards. Most systems have been in place an average of six years, with upgrades occurring every 2.3 years. Users report a 10.8 month average return on investment time.
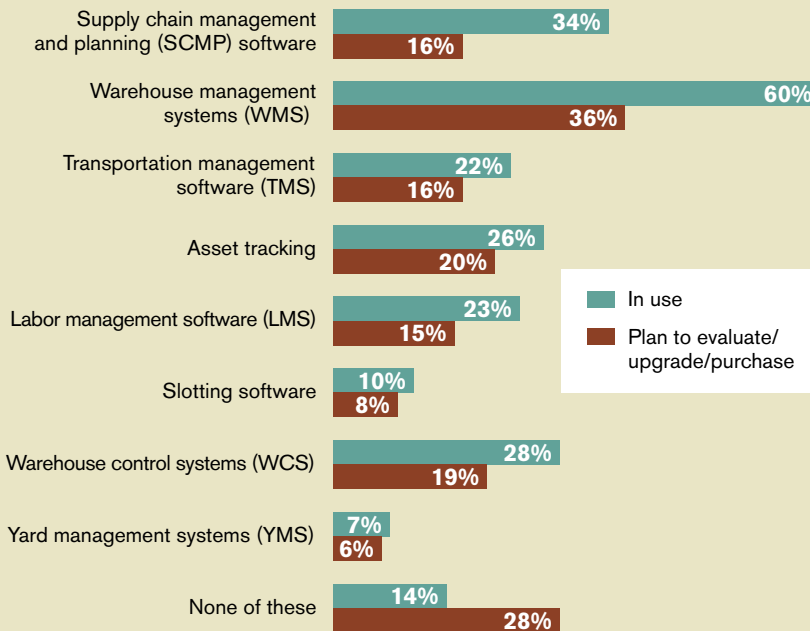
The majority of those who plan to implement a LMS expect to do so within the next 6 to 12 months (57%),

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Approximately how much will your company spend on supply chain software for your operation including license, integration and training in the next 12 months?
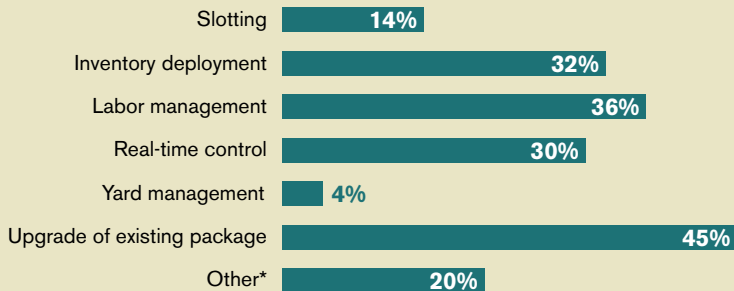
$2 million +	**3%**
$1-1.9 million	**4%**
$500,000 - $999,999	**11%**
$100,000 - $499,999	**28%**
Less than $100,000	**54%**

Average $ plan to spend: **$397,000**
Median $ plan to spend: **$94,000**

Source: Peerless Media Research Group

Which of the following software is in use in your facility and what are your plans to evaluate, purchase or upgrade in the next 24 months?

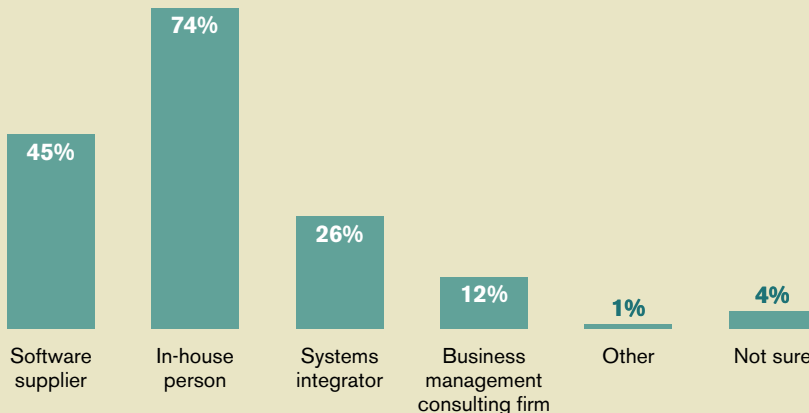| Software	In use	Plan to evaluate/upgrade/purchase
Supply chain management and planning (SCMP) software	34%	16%
Warehouse management systems (WMS)	60%	36%
Transportation management software (TMS)	22%	16%
Asset tracking	26%	20%
Labor management software (LMS)	23%	15%
Slotting software	10%	8%
Warehouse control systems (WCS)	28%	19%
Yard management systems (YMS)	7%	6%
None of these	14%	28%

Source: Peerless Media Research Group

What are the key reasons your company is planning to consider or buy warehouse management systems (WMS) during the next 2 years?

Category	%
Slotting	14%
Inventory deployment	32%
Labor management	36%
Real-time control	30%
Yard management	4%
Upgrade of existing package	45%
Other*	20%

* Mentions include: changes in warehouse design, replenishment management/e-commerce implementation implementing an ERP system, add features and functionality/current system not very robust, lot tracking and event billing purposes

Source: Peerless Media Research Group

When your company purchases software, who do you typically use to integrate the software installation?

Integrator	%
Software supplier	45%
In-house person	74%
Systems integrator	26%
Business management consulting firm	12%
Other	1%
Not sure	4%

Source: Peerless Media Research Group

followed by another 39% who anticipate doing the same within the next 24 months. Engineered labor standards—established performance rates and productivity goals based on the unique characteristics and metrics of each work assignment—are currently in use by 27% of respondents with another 31% indicating an intent to implement the same. However, only 38% have adopted an employee payment program tied to productivity improvements.

The last two areas we examined, slotting optimization software and yard management systems (YMS), had far fewer respondents—corresponding to their much lower rate of adoption.

Just 10% of respondents report the use of slotting optimization software to determine the best inventory storage medium, picking methodology and rotation frequency. Those who answered indicated that 36% reslot quarterly, 45% reslot every six months, and 18% reslot once a year.

Only 7% of respondents indicate that they currently use a YMS to streamline scheduling of inbound and outbound shipments through their yard and docks. Of those, 45% had only had their YMS in place for five years or less. □