Powerful inventory management

Diligence and modern technology combine to help forecast future nursery sales

By Peter Szymczak

The new year is an opportune time to look back and see how sales fared.

What plant was the best seller? How many plants had to be dumped due to overproduction? Who was the highest-selling salesperson? Which customer bought the most containers of a certain plant variety? Based on these numbers, what kinds of forecasts can be made for next year, or even several years down the road?

The ability to provide accurate answers to these questions starts with the all-important process of inventory management. Inventory management (IM) includes counting plants and using computer programs that keep track of that information so it can be given to salespeople and production people.

“The needs for information, for analysis, are continuously increasing, so you have to try to keep abreast of that information to do your best job,” said Art Anderson, general manager and chief operating officer at J. Frank Schmidt & Son Co., the shade, flowering and specialty ornamental tree nursery headquartered in Boring, Oregon. “You always need to know where you are relative to where you’ve been in the past, and where that plant will be in the future. It all has to tie together.”

Organization is key

Managing inventory is one of the most critical tasks facing nursery and greenhouse managers.

“How can a farm — unless you’re just a one-man operation — know what’s available for sale or coming on for sale in future years unless it’s organized?” Anderson asked. “It’s absolutely necessary that anyone can glean information: how many, what size, when, future projections … It’s absolutely vital to doing business.”

In order to maintain control of plant materials, an IM system is needed. By maintaining a current, up-to-date plant material inventory, problems arising from overselling or leaving plants unsold can be minimized.

J. Frank Schmidt, for instance, employs three full-time people in the inventory department. They are supported by another dozen out in the field at various times of the year, doing counts and reporting back that information.

Rodger Duer, site inventory manager at Monrovia, stressed the importance of cycle counts — the auditing procedure whereby a small subset of inventory, in a specific location, is counted on a specified day. Duer said he orders cycle counts based on activity.

“When we have a new can in or movement of plants, or significant scrap, the system automatically kicks out the need for a cycle count of that item.”

The software program Monrovia uses to manage inventory is programmed to require a minimum number of counts for each growing area. “If there’s not enough activity, the software will randomly kick out a count,” Duer said. “Basically, we’re counting every day.”

Remigio Echeverria Bucio, division grower at Blooming Nursery, tracks plants on an iPad using customized inventory management software. Division leaders are responsible for keeping the ready dates, quantities and quality of each crop in their area accurate in the system at all times.

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Designing the right system for you

The ideal IM system should be able to accurately indicate — at all times — how many plants of each variety or cultivar are available, in what size, and where are they located within the greenhouse operation.

“Going back five or 10 years, things were sketchy as far as accuracy was concerned,” Duer said, noting that Monrovia addressed those issues when it switched to its current software system in 2009.

“Now, we have real-time information on orders in the system, what’s scheduled to ship and when, on the condition and quantities in the field,” Duer said. “Our sales reps have a lot of confidence, and customers can go online and actually see the plants they’re going to get the following week, how they look in the field today.”

Availability lists are posted online so that Monrovia sales representatives and customers can access them anytime; also, most growing areas have a dedicated employee whose job is to take plant photos with a cellphone.

“A custom program automatically uploads the images to the servers and becomes immediately available, along with comments on the plant’s condition — whether it’s in bud or bloom, or showing fall color,” Duer explained.

Monrovia grows and ships millions of plants, necessitating a technically advanced IM system. By comparison, many small to medium-sized growers manage inventory simply by using QuickBooks and Excel.

In addition to a grower’s size, experience can also play a big part in how inventory is managed. Vinny Grasso, sales manager for the past 18 years at A&R Spada Farms in St. Paul, Oregon, keeps it as simple as possible.

“We take a physical inventory once a year. In July, we estimate what plants are saleable and put them on an availability list,” Grasso explained. “The system is not very complex, other than the experience to be able to look at a plant in July and, knowing that it’s 3-feet-tall now, it will be 4 by the end of October — that’s the key.”

Grasso uses a customized software system, SpadaTech, which automatically adjusts inventory and updates the availability list as product is sold. The list is updated daily on www.spadafarms.com, and also accessible via a link on the company’s online Nursery Guide webpage.

Grasso estimated there are about 600 line items on his inventory list, and last year the grower moved 1.6 million plants. Despite these sizable numbers, Grasso tries to not overcomplicate things.

“Too many inputs, too many people, product diversity, seasonality of those products — all add to complexity.”

Complexity is the bane — and boon — for Grace Dinsdale, owner of Blooming Nursery in Cornelius, Oregon, a wholesale grower of more than 2,200 varieties of perennials, flowering shrubs, herbs, ground covers and ornamental grasses.

Dinsdale also owns and operates a nearby retail business, Blooming Junction.

Depending on the time of year, Dinsdale may be tracking up to 10,000 different plants in various stages of production and saleability.

Blooming Nursery has been in operation 33 years. “In the beginning, I walked around and did a manual list,” Dinsdale recalled. “Then I called people up and talked to them about what was ready. That was pretty primitive. I look back kind of wistfully on those days, because the whole process was so fast and cheap.”

In 2004, Dinsdale invested in a database-driven IM system that allows her to track inventory “down to the gnat’s eyelash,” she said. “We’ve invested a lot of labor and money in it, but it’s powerful.”

Dinsdale said the technology has greatly empowered her staff and customers alike. Before the operation went high-tech, “Everything in the nursery had to pass through that central person — me! That means you have a huge information bottleneck. Everyone was moving blindly and couldn’t see the goal ahead,” she said.

“Now, everybody knows what we’re trying to do here, and we can put it on our website where our customers can see what we have now and what’s coming up.”

The IM system has improved the grower’s ability to time crops and hit ready dates with greater accuracy. “That probably has reduced our costs, because we don’t have things on the ground as long,” Dinsdale said. “It’s expensive to maintain and it takes so much of our time, but I can’t imagine doing what we’re doing without it at this point. It’s not optional.”

Smarter, not harder

Managing nursery inventory is “like shifting sand. It’s nearly impossible to control, but we supply simple and easy-to-use tools to manage it,” said Ben Marchi-Young, sales and marketing manager at SBI Software, the tech firm based in Portland, Oregon, that custom-built the inventory management system used at Blooming Nursery.

Other local tech companies such as PlantX and ACS Software also develop IM systems to fit the needs for most any sized operation.

“We’re seeing grandchildren from multi-generation nursery and greenhouse families — those in the 25 to 45-year-old age range — who are starting to take
the reins,” said Marchi-Young. “Many of them grew up with and understand technology, and the benefits it can provide.”

Mobile devices give growers out in the field the ability to make adjustments and track movement of their material, so that staff in the back office can be made aware of changes in inventory immediately. Work orders to begin picking plants can be issued directly from the field and sent to shippers at the dock locations. Tablets or smartphones can then scan out the product as it leaves inventory.

“With better internal visibility comes more accurate availability lists, allowing you to focus on what is or going to be available to sell,” Marchi-Young said.

At Gold Hill Nursery in Hillsboro, 100-percent inventory accuracy was the goal when they built their IM software from the ground up. “We had to put quite a bit of money into the development and support infrastructure, and we’re still adding to it,” said Blaine Andersen, sales manager at Gold Hill. “But the result is the inventory is live. When you log in — whether it’s from your computer or my sales rep on his iPad — the inventory is up-to-the-minute accurate.”

More than half of Gold Hill’s employees use smartphones every day for their tasks: counting plants, tracking the location of plant material, and shipping transactions are all documented as they are happening via a farm-wide Wi-Fi network.

In addition to inventory management, the software has a built-in shipping module that puts orders together as loads. “We have a series of picking tickets that go out when the order is pulled, and loading tickets that go out when the truck is here and the order is ready to be loaded,” Andersen explained. “The system has cut down on our errors by 75 percent.”

Gold Hill’s IM system has only been in place for about two years — not nearly enough time yet to realize a return on their investment. “The true payoff won’t come for some time down the road,” Andersen said. “We’ll need a few years of history for the system to really look back on, since it takes us from four to eight years to finish. Until you can finish a cycle, you can’t really know.”

In the meantime, Gold Hill is using all the sales and production data they collect to forecast future growth. “We can ask, ‘How many Alberta spruce are we going to grow this year?’ Based on sales history, we know who we sold it to, what time of year and how much. We can use that data to decide what to do in the future.”

Peter Szymczak writes for and designs Digger magazine. Email him at pszymczak@oan.org.