the PRODUCTIVITY GUIDE

2014

You'll learn super strategies for streamlining your order management, setting up your shop for optimal workflow, setting a price list for profit and more. Plus, industry experts will weigh in on how to make any size shop ramp up efficiency overnight.

by **BETSY CUMMINGS**

An entrepreneur looking to expand his earnings thought he'd run a company from afar. What he thought was a good idea was quite the opposite. It didn't take long for the Maryland-based executive to lose control of his New York-based decorating shop. By the time Joyce Jagger, The Embroidery Coach, showed up, the decorating shop was all but folding in on itself. Because the owner worked offsite, he only visited the company's offices occasionally. "Orders weren't being processed on time, deliveries were late, there were too many mistakes and customers were unhappy," Jagger says.

After just a few hours as an observer in the facility, Jagger notes, the problems were obvious. "There were no checks and balances, and they'd discontinued the system in place … because they thought those systems took up too much time." Previously, those systems had worked seamlessly. That was just for starters. No employees were cross-trained, production managers spent too much time performing tasks meant for workers, and Jagger noticed a handful of crew idly chatting on the phone or entrenched in Facebook. What's more, "the office manager couldn't get the production manager to cooperate with her," Jagger says.

For Jagger, an Ithaca, NY-based industry expert and embroidery business consultant, who once owned the company in question, it was too much to simply let it go. She agreed to act as a part-time consultant/employee to turn the firm around. Through a series of systems, checks and standardized processes, Jagger has been able to bring the company to a point where they're seeing black again. But its potential demise is one of the casualties decorators can face if they don't streamline their processes to run more efficiently.

To help decorators avoid a similar fate, we scoured the industry for some of the best tips and practices on how to become more productive and efficient. Read on to find out how to give your company a business tune-up.

TIME IT OUT

Nothing kills a company faster than lost time. That holds especially true for decorators whose bottom line relies on running jobs efficiently, experts say. To start, decorators should look for tasks and areas of the company that are time wasters. "I teach my students to keep track of their time from the time they're waiting on the customer until that job goes out the door," Jagger says.

$150 each, it may seem costly, but Atkinson says the minutes saved every hour and day by allowing each station to have its own cart pays for itself almost instantly and boosts the bottom line by increasing production each hour. In fact, it's often small fixes like this that can buy decorators hours of time each day. Want workers really efficient with tools always at the ready? Jagger suggests that machine workers and others wear aprons with plentiful pockets so they always have their tools with them. Likewise, inventory, such as blanks needed for a particular job, should be located next to work stations, not across the floor.

> ### "WE HAVE A *SOFTWARE SYSTEM* THAT DOESN'T ALLOW US TO PUT AN ORDER INTO PRODUCTION *UNTIL ALL THE BLANKS* ARE FILLED IN."
> ANDY SHUMAN, ROCKLAND EMBROIDERY (ASI/734150)

One sure way to waste time is to make staff hunt for tools that should always be at the ready. "Make it easier for people to do their jobs," says Marshall Atkinson, COO of Milwaukee-based Visual Impressions (asi/743500). Inventory, for example, should be next to work stations and not across the shop. "If you have a crew of people always fighting over a tape gun, you're penny-wise and dollar-foolish," Atkinson says. "Spend $9 and buy another tape gun." In fact, Atkinson says, he makes it a daily practice to walk his shop floor asking workers what tools they could use to save time and more efficiently perform their jobs.

Recently, an employee said an extra cart would be helpful for storage. "We didn't have enough and they were fighting over the carts," he says. Atkinson bought six carts, one for each work station. And at

Jagger also suggests that shop floor managers can regain minutes by examining the design of large-stitch orders (those above 100,000, for example) and seeing where they can cut time by, say, reducing unnecessary trims, Jagger adds.

ABO (ALWAYS BE ORGANIZING)

"Whenever you work through a bottleneck to create a smoother workflow, you're going to create a bottleneck downstream," says Rob Dubow, CEO of Dubow Textile (asi/700107), a decorator in St. Cloud, MN. "And bottlenecks occur daily," he says. But there are steps companies can take to minimize their occurrence. Dry runs are key, Dubow adds – so key that his company often maps out two flowchart versions of a particular product, theoretically running it through the company's system twice to see where potential road-

↑ **RAMP UP**
WANT TO CUT COSTS AND INCREASE EFFICIENCY? IT'S NOT TOO HARD, PRODUCTIVE DECORATORS SAY. BUT THERE ARE CERTAIN CHALLENGES THAT CAN BE A DECORATOR'S UNDOING IF THEY'RE NOT NIPPED IN THE BUD.

START COUNTING.
Something as simple as counting can make all the difference in the world, says Joe Thompson, marketing manager for Stitch Designers (asi/741145), based in Louisville, KY. Even the best suppliers have an "error rate of 2% to 3%," says Thompson, about apparel suppliers sending orders with missing garments. That's a lot of missed items when you're fielding upward of 2,500 orders a month. By counting before decorating begins, the company spots missing pieces before they hit the production floor.

LESS IS MORE.
It seems counterintuitive, but sometimes fewer heads on an embroidery machine offer greater production, says Anna Johnson, president and owner of Phoenix-based Super Embroidery and Screen Printing (asi/700101). The more heads, the greater chance of thread breaks, Johnson says. Plus, garment turnover is faster on a machine with fewer heads.

COUNT ON CONTINGENCIES.
At least once a day Jeff Taxdahl hears this from a client: "We don't want orange shirts. We want blue shirts." Mind you, orange was the color of their original purchase. For Taxdahl, owner and president of Thread Logic, a decorator in Jordan, MN, being flexible is part of the daily decorating grind. How do you roll with the punches? Standardize processes and always make sure at least one machine or shift is flexible enough to handle sudden changes. Most decorators say they also don't operate at 100% percent capacity – in staff or equipment. That way they can move work around to accommodate unexpected hiccups.

blocks might occur, before actual production ever begins.

To keep production flowing and flexibility a constant state of mind, managers at Team Mates Inc. (asi/90674), "meet frequently, often several times a day to discuss rush orders and overall production," says Mike Little, president of the Eagan, MN-based company. And for good reason: "A workflow plan won't work unless everyone is aware of the plan and follows it."

To make that plan concrete, Jagger suggests decorators make a blueprint of their production space. That gives managers a bird's eye view of how the plant is laid out. A simple layout should include matching inventory per machine (thread storage behind each embroidery machine, for example), and staging areas divided by job with caps "in one area, the small left-chest jobs in another area and the large jacket-back or full-front chest jobs should be in another area," Jagger writes in her book, *The Truth About Embroidery Business Success: 7 Elements to a Highly Profitable Home-Based Embroidery Business.*

INVEST WISELY

"You should only invest in new machines if it makes sense for your business," says Jeff Taxdahl, owner and president of Jordan, MN-based Thread Logic. That seems obvious, but too many companies, particularly those new to the industry, think plunking a large fortune into the latest equipment is the way to a more efficient, profitable business. While it's not the worst idea ever, industry insiders say older machines can be just as efficient,

cost less and reduce costs, particularly for new decorators with a fledgling foothold in the marketplace.

Since 1985, Stitch Designers (asi/741145) has purchased Happy embroidery machines. And while the Louisville, KY-based decorator isn't opposed to investing in new equipment, it knows a bargain when it sees one, says Joe Thompson, the company's marketing manager. A new 18-head Happy embroidery machine can run as much as $140,000, Thompson says. "We picked up three of those last year for less than $20,000 total." Because of some companies tanking in the recession, the industry has plenty of used machines from which to choose. In Stitch Designers' case, the company has a long-time employee who specializes in Happy machines and can keep older ones running beautifully.

Second only to machinery, employees are perhaps a decorator's biggest investment. For that reason, it's crucial to cross-train them, Taxdahl says. That way, virtually anyone who comes across an order can instinctively spot a potential mistake. "The last thing we want to do is embroider the wrong color long on the wrong color shirt," says Taxdahl of his 12-member staff. "Then we've got a problem."

AUTOMATE, IF POSSIBLE

Productivity is often lost unknowingly in daily activities that are seemingly productive, but really just time wasters. "If anybody in the back of the shop has to walk up front and ask, 'what does this mean?' in reference to a written job order or note, you're doing it wrong," Atkinson says. "One of our rules is no handwritten notes."

For that reason, many decorators say they're opting to automate many of their processes. In fact, plenty of shops are automating jobs from the time they enter their systems until the second they leave the shop floor and are shipped to end-users. It clarifies order instructions and also saves time. "Having the ability to talk to everybody in the company at once without having to get out of your chair is efficient," Atkinson says.

Visual Impressions uses Shopworx, a business and order management software system. While other decorators insist that orders should be automated if at all possible, they disagree on how to do that. Many say free programs such as Google Docs (docs.google.com) are sufficient, while others say they rely on Excel. Regardless, systemizing orders is the key.

"We have a software system that doesn't allow us to put an order into production until all the blanks are filled in," says Andy Shuman, vice president of Rockland Embroidery (asi/734150), a contract decorator based in Topton, PA. What's more, Shuman adds, on any given day the company can be fielding 1,800 different orders. Thanks to automation and the company's software virtually anyone who answers the phone can instantly look the order up and respond to customers asking for updates. "I don't know that we'd have a way to find the order without the software."

BEST ADVICE

FROM PRODUCTIVITY EXPERTS

INDUSTRY VETERANS AND EXPERIENCED DECORATORS OFFER THEIR BEST TIPS FOR IMPROVING YOUR SHOP'S EFFICIENCY.

Tip:
USE CLOUD-BASED DOCUMENTS TO SHARE AND COLLABORATE.
How to:
Use cloud-based document creation and management programs to share information or to collaborate on projects. Internally, creating a document and inviting critical team members to work and comment online prevents wasted time and effort tracking changes and moving traditional documents between participants via e-mail. Moreover, as cloud-based services often have versioning capability, it becomes easy to see who made changes and to roll an altered document back to previous versions of any document at will. With the variable access control, your team can share read-only versions of documents with other departments. These documents can even be used as management tools for simple internal projects; with a communal repository for notes, scheduling and assets, you can keep all participants involved in a project or job informed.

Used with clients, the same benefits apply: When you're creating spreadsheets for order gathering, as you might do when aiding a club or event sponsor to collect individual orders for bulk production, using a cloud-based solution allows decorators to help in organization and correction of data; should changes occur outside of the initial order, live updates to the present counts can be made.
My story:
"I recently needed to manage a large order that consisted of many individual sponsors, each with their own logos and personalization, being given sponsor-reward jackets for an event. Using a

cloud-based spreadsheet, I encouraged my client to track their orders live with me, and I, in return, tracked logo preview approvals and production on the same sheet. This proved incredibly handy when, close to the event, the organizers were forced to send sponsors directly to us to create and complete decoration on their jackets. I was able to track these 'stragglers' and additions with ease, allowing for transparent production and billing." – *Erich Campbell, Black Duck Inc.*

Tip:
BE IN CONTROL OF YOUR ENTIRE ORDER CYCLE.
How to:
Workflow is always important so your business runs smoothly. Having a shipping/receiving area that's organized will always set the stage for your entire order process. When you're taking orders, use a computer-based program to track them. If you take orders on paper forms, always transfer them into the online system. If you order your client's product, use a numbered purchase order form that lists the order date, items ordered, supplier name and address. This helps verify that the product has been ordered, whether it will ship together or separately and when it'll arrive.

A purchase order is also a great help when you receive the order. If you're a contract house, always require your customers to provide a purchase order with this information for your receiving department. Otherwise, you might mistakenly receive the wrong products, sizes or colors; or you may not realize you're receiving partial shipments if some pieces shipped from a different location.

Having specific areas for partial orders (row A), incorrect orders (row B, waiting for art/color approval (rows C and D) and complete orders (rows E, F, G) makes

staging for decoration much easier.
My story:
"In our shipping area, we painted 24-inch squares back-to-back in rows. Then, we numbered the rows A, B, C, D, E and F, and the squares 1, 2, 3 and so on. When we receive or partially receive an order, we enter into our order-management system that it's located on, for example C6 or F2. This way, it's very easy to find once the completed order is ready to go into the production area or once the art is approved and ready for staging. Note: You can also use this system using dry-erase boards, if you write out the rows and numbers for locating orders." –*Anna Johnson, Super Embroidery and Screen Printing (asi/700101)*

Tip:
CREATE A PROFITABLE PRICING LIST.
How to:
You want to offer a competitive price (that's based on your costs, not your competitors' pricing). Your quoting strategy should be based on two factors: What it costs you and how much profit you want with the job.

The best overall strategy is to sell your value proposition, which is what you bring to the table, rather than being the lowest quote possible. Do you have a great art staff, speedy service, knowledgeable industry veterans, free delivery or other wonderful things that set you apart from the competition? In the decorated-garment industry, there are many niches that companies service, and it's important that you scope out your area carefully. Because of the industry's complexities, and the fact that nearly every job is a custom deal, it's hard to find a price list that will fit a "one-size-fits-all" structure. However, calculating what it costs you to do each step in your shop is the key to understanding how to build a basic price

matrix that you can use with your customers. Here are a few steps:
1. TOTAL YOUR OPERATING EXPENSES AND DETERMINE YOUR OVERHEAD.
These are your basic costs: Your building rent or mortgage, utilities, insurance, equipment and so on. Calculate how many garments you can print per month and using your basic business expenses; divide to get your overhead cost per garment.
2. FOR EACH STEP IN PRODUCTION, DO TIME STUDIES.
Using the assigned labor dollars, calculate what it costs you for each basic labor task. These tasks are items like entering an order, checking inventory, designing a shirt, burning a screen, mixing ink, printing or stitching a shirt, folding and poly-bagging a shirt or any other repetitive task, for example.

Calculate this by using labor dollars divided by garments decorated too, but it's good to know what each step along the way costs you. Your labor dollars are generally the biggest variable and hardest to control without a good management team.
3. YOU CAN'T IMPRINT MANY SHIRTS WITHOUT CONSUMABLES
(like thread, backing, ink, emulsion, chemicals, screens and more). Divide the expense on consumables by the yearly impression total to get your direct cost for decorating.

When you total these costs, this will give you a general idea what it costs you to imprint a shirt. This is a basic number, as the actual cost will vary with the specific order. The size of the job, design complexity, garment type and color will all influence the true cost. If you have this extra variable cost, you can then add it to

the customer's specified shirt for the order and get your basic per-shirt price.

Most pricing structures are based on adding the garment price (cost and shipping) to the decorating price. Next, decide what profit you want to make on the job. For pricing matrices, the percentage markup starts higher for smaller-quantity orders and gradually lowers for larger quantities. Decide what you want to display on a quote: Some shops just give one price; others give line-item explanations on all charges (shirts, screens, ink, number of flashes, number of stitches, arwork and digitizing fees, etc.).

The value in using your own information to build the price is that it's based on your company's performance and what it costs you to produce the job. To find a higher margin, simply find methods of reducing your expenses. This can be as simple as bulk-ordering supplies (such as ordering ink in 55-gallon drums instead of one-gallon buckets or thread in bulk), starting a sustainability program to reduce your energy consumption, or purchasing equipment to automate tasks instead of having a staff member perform the duty. The key is to think about your workflow, how and why you're doing something and determine if there's a better method available for the same task. With some thought and planning, you can reduce your expenses and build more profit into your jobs. – *Marshall Atkinson, Visual Impressions (asi/743500)*

Tip:
CONTROL YOUR WORKFLOW.
How to:

Though you may see yourself as an embroiderer, you're really a manufacturer who's producing a final product that's the sum of several independent components that are all assembled in your shop. Apply an assembly-line mentality to your workflow. To keep it running continuously and efficiently, have all materials on hand when required and be vigilant against bottlenecks in production that can jam up the system.

ORDERING: The first step is to make sure you have all the required raw materials, which in your case means your digitized design, blank apparel, threads, backing, bobbins and so on. For specialty jobs, that list could also include 3-D foam, sequins, fabric and adhesives. When you close a sale, immediately order or confirm that you have the necessary materials for the job.

SCHEDULING: A simple method is to add each new job to a Microsoft Outlook task list and check off each required item as it arrives. Once the task entry is completed, simply drag it into an open spot on your Outlook production calendar so you know it's ready to run.

STAGING: In addition to your electronic tracking, set up a physical area in the shop to store the actual materials for each job. Investing in industrial shelves and laundry baskets is a simple solution because it's very visual. Print out a copy of the job and tape it to the basket(s). As the items arrive place them in the basket and check it off. This keeps everything in sight, but not in the way.

PRODUCTION: As your jobs come up on the calendar, move the baskets into your hooping area and start producing. When finished garments come off the machine, don't let them pile up. Have a dedicated finishing area where you place the garments as you unhoop them. (This could be as simple as more baskets.)

FINISHING: Ideally you can trim threads and cutaway excess backing while other items are sewing. But there are cases where it will just have to wait until later. Either way, having a designated area simplifies the tasks and keeps things moving. Ensure you have enough space to fold and pack the garments neatly and cleanly. This may also serve as your shipping area.
– *Jimmy Lamb, Sawgrass Technologies*

Tip:
KEEP YOUR DOWNTIME TO A MINIMUM WITH CAREFUL PRODUCTION PLANNING.
How to:

Begin your production planning by creating a list of all work orders for the upcoming week. Focus on the fact that most work orders contain multiple production jobs such as shirts, caps, aprons and so on. List all of the individual jobs within the work orders.

Be aware that a common production mistake is to process jobs in the order you receive them. However, except for a rush order, it's far better to schedule your work by garment type and production settings, to maximize machine run time by minimizing the downtime associated with job setup.

Once you've create your job list, write the details next to each job using the following breakdowns as a reference:

FIRST-LEVEL BREAKDOWN by style of frame/hoop: The time to change from cap to tubular or tubular to sash equates to unproductive downtime, especially if it

has to be done multiple times during one work shift.

SECOND-LEVEL BREAKDOWN by size of frame/hoop: The first couple of runs of something different are always slower as the operator adjusts his routine to accommodate the change. Once his comfort level reaches peak performance, his output increases. Because of this, it's more efficient to work with the larger designs as a group, then the medium designs as a group and then the smallest ones.

THIRD-LEVEL BREAKDOWN by garment/product type: Fabric type and thickness affect hooping. T-shirts must be treated differently than sweatshirts, which must be treated differently than denim shirts, and so on.

FOURTH-LEVEL BREAKDOWN by thread colors: Changing threads on a machine is time consuming. Swapping four colors of thread on a six head means 24 cones total. At 30 seconds per cone, that's 12 minutes of downtime.

Now organize and schedule your jobs by grouping them initially by type of hoop/frame. Then break down each of those groups into sub-groups by size of hoop frame. Then, break down each of those sub-groups into additional sub-groups by garment/product type. Finally, look at your thread colors and sequence the jobs to minimize changing out any threads.

For example, the work order for Joe's Restaurant contains polo shirts, aprons and caps. The polo shirts will be sewn using small tubular hoops, the aprons with a clamping system and the caps using cap frames. This work order actually has three separate jobs. Make three copies of the work order and place one copy with each job in order to keep up with where they belong. Repeat this process for the remaining work orders. You're ready to schedule the work based on your groupings. You'll save time and money by keeping your machines running at maximum efficiency.

> ## "WHENEVER YOU WORK THROUGH A BOTTLE-NECK *TO CREATE A SMOOTHER WORKFLOW,* YOU'RE GOING TO CREATE A BOTTLENECK DOWNSTREAM."
> ROB DUBOW, DUBOW TEXTILE (ASI/700107)

Tip:
CREATE AN ORGANIZED PRODUCTION AREA TO KEEP YOUR OPERATIONS RUNNING EFFICIENTLY.

How to:
In your shop design, you must have easy access to everything you need, but not necessarily everything you own. The focus should be to store the items most frequently used within the easiest reach of your operator, while less-important tools are positioned further away to keep the work area uncluttered. Here, we'll show how to create one work area (which optimally would include up to three single-head machines run by one operator), so repeat this process for each separate equipment work station in your shop.

Start by creating a list of all tools and supplies that are necessary for running production such as bobbins, threads, needles, backing, hoops, tools and office supplies. Rank each item on a scale of one to three based on frequency of use, with one being constantly, two being periodically and three being occasionally. Then, draw three concentric circles on a sheet of paper and place an "X" in the center. The "X" represents your machine; each of the circles will be for items based on frequency of use. This will help you decide where to physically place things.

CIRCLE 1: If you're standing in front of your machine, circle one should be within arm's reach, a distance of up to four feet from the machine. Everything labeled as a "one" should fit neatly within this area. Get creative and invest in some small containers with magnets or suction cups

for holding things like nippers, tweezers and bobbins. Simply stick the containers on the machine for easy access.

CIRCLE 2: These items, which should be dedicated to hooping, should be within six to eight feet of your machine. Note: You don't need to store hoops in the immediate area, other than the ones being used for the current job. Ideally, since you spend a lot of time on a computer, it should be placed within this space too.

CIRCLE 3: This is where you'll place items that need to be accessed occasionally, such as threads and tools. Specifically, threads are only accessed between jobs, so they don't need to be in the center of the action, and tools, spare parts, hoops, frames and sashes will generally go here.

Next, invest in the proper storage containers for your supplies and equipment. Storing things neatly and consistently is a big key for staying organized and keeping everything accessible. Review and invest in closet organization systems and see what you can use for your shop. Label items and always put them away after use. Finally, think of your production process as an assembly line. You receive your raw goods, stage them, hoop them, sew them, finish them, pack them and ship them out the door. The idea is to keep the assembly line moving without anything falling off or piling up. A proper shop layout will keep your production process running smoothly. –*JL*

USE ELECTRONIC TOOLS AND APPS TO ASSIST WITH SCHEDULING AND TASK MANAGEMENT.

How to:

Before you jump into hiring additional employees, use e-based tools for task management. Stick with a handful of e-programs and apps that easily communicate with each other on multiple devices. beware of phone apps that don't interface with your core programs.

1. GET TOTAL ACCESS. Set up a Microsoft Outlook exchange server so that you can access and manage your contacts, task list, calendar and e-mail on your computer, smartphone and tablet. Also place your documents on a Windows SkyDrive so you can access your files anytime, especially on sales calls. In addition, programs like Microsoft OneNote that interface with Outlook and SkyDrive give you the ability to make notes on the fly and access them later, eliminating all paper notes.

2. MANAGE YOUR CUSTOMER DATA. You need an efficient way to manage sales leads, track marketing campaign effectiveness, create customer profiles and more. For smaller shops on a budget, Microsoft offers a plug-in for Outlook 2010 and 2013 called Business Contact Manager.

3. CREATE AN "IRRITATION LIST." As you encounter bottlenecks in your business, record them in an OneNote file on whatever electronic device is closest at hand; this list will help you paint an accurate picture of the daily challenges of running your shop. Each week, review the list and see where your challenges are, and focus on the ones that impact your business most.

Tip:

INVEST IN A SUBLIMATION SETUP.

How to:

Sublimation gives you the biggest bang for your buck since you can customize apparel and many types of promotional items. You need 500 square feet or less for your setup, and you can also trailer your sublimation setup at fairs and other events; plan to spend between $2,500-$5,000 for your initial equipment and supplies. In our shop, for example, we have an Epson 1400 with a bulk-ink system, a Knight Combo swing-away press, a Knight hat press and a Knight 16" by 20" swing-away press, 12 mug wraps and two Euro Convection Ovens. You'll also need transfer paper for imprinting ceramic, polyester and cotton products.

MY STORY: "Our company, which started out of our home 10 years ago, devoted 144 square feet to sublimation. This process carried low overhead and wasn't messy. This process allowed us to fulfill one-piece orders, up to hundreds of pieces. By selling sublimated products for a year or two, it allowed us to build up the client base to afford to go after our embroidery equipment next. The sublimation process was a great building block to get us into other processes." – *Howard Potter, A & P Master Images (asi/702505)*