INNOVATIONS IN DIGITAL PRINTING

By Kimberly Biesiada

f you haven't purchased a wide-format printer in the last two years, you may not be aware of the many advancements that have been made to this evolving technology. The newest generation of printers from market leaders like Canon, Epson, and HP have grown in leaps and bounds from their predecessors, boasting improved print color and clarity, lower operational costs, and increased speed, among other benefits.

The fact that professional-quality prints have never been easier to produce pairs well with the fact that printing—and framing—are in high demand thanks to consumers spending more time at home over the past year, looking through pictures and updating what's hanging on their walls. Offering your customers a full-service printing and framing experience means you aren't losing out on an additional revenue stream.

BETTER COLOR, SHARPER CLARITY

For most independent frame shops, an aqueous printer—a printer that uses water-based inks—will make the most sense based on capacity needs and physical footprint. (There are other kinds of printers, such as solvent, eco-solvent, and latex, that may also be a good fit for your business if you plan on printing at very high volumes.) The newest aqueous printers can reproduce more colors than ever before, and pigments are rich and long-lasting.



Epson's SureColor P9570 is another big seller for frame shop and gallery owners. It works in tandem with Epson's ink, which has been tested to last at least 200 years for color and at least 400 years for black and white.



Canon's PRO Series, including the PRO-4100 shown here, are popular among framing retailers. Updates in the past year are aimed at improved ease of use in addition to speed, color, and clarity.

Gary Barker, national sales manager at Digital Technology Group, pointed to new printers' Dmax as an indication of how good the color has become. Dmax is a measure of the deepest black tone a printer/ink combination can produce, and it's an extremely important quality factor; the better the black, the more contrast a print has.

For example, the Dmax of the Epson SureColor P9570, a 44" wide-format printer released in December 2019, "is probably four to six times greater than it was four gener-

ations ago," Barker said. "Just in the last upgrade, it's 1.5 times better than it was."

The latest generation of printers can also match 99 percent of Pantone's solid-coated color guide, Barker said. That's particularly important when printing fine art reproductions; the greater your printer's color gamut, the better opportunity you have at matching the colors in an original piece of art.

Rich Reamer, senior marketing director at Canon USA, said the company's PRO Series printers—first introduced in 2016, with the latest update released in December 2019—have better color than ever before. "I think what this series does really well is keeping up with the camera side of the business," he said. "Cameras can capture so much within an image now, and I think where the PRO Series really thrives is being able to reproduce what you've captured."

Today's printers also offer better print clarity than their predecessors, so the wide range of printable colors will show up clean and sharp on both fine art reproductions and customer photos.

FASTER SPEEDS

Time is money, and when you're offering printing as part of your framing business, you want to be able to move through jobs efficiently.

The newest printers cut down on production time, often by notable amounts. According to Digital Technology Group's data, the Epson P9570 prints up to three times faster than the P9000, which it replaced. What does that look like in numbers? In the P9000's quality mode, its print speed was 65 square feet per hour. In the same mode, the P9570 can handle 194 square feet per hour.

For example, if a retailer wants to print a 20" x 30" image for later framing, "what used to take them 15 or 20 minutes on an older printer can be done in just about three minutes," Barker said.

"Even if you're not doing a high volume of printing daily, the ability to complete a high-quality art print very quickly allows you to get that print mounted and framed much, much faster," he added.

USER-FRIENDLY DESIGNS

Over the last few decades, digital printing technology has evolved in game-changing ways; but that isn't the only reason behind some of today's most user-friendly printer features. Many changes have been made in recent years as a direct result of customer feedback.

"Ease of use is sometimes overlooked," said Reamer while highlighting some of the features of the Canon imagePROGRAF PRO-4100. The PRO-4100, which is a 44" model, is a popular choice with frame shop owners today, according to Reamer. Some have invested in its 60" counterpart if they have room in their shop to accommodate its footprint.

Among these printers' latest usability improvements is automatic internal cleaning, aimed at eliminating problems like banding on prints that can result from a clogged



For those who want to dip their toe into the printing world but aren't ready to make the investment in a larger printer, Epson's SureColor P700 and P900 printers are smaller, less expensive options that have proven popular with framing retailers.

nozzle. The PRO Series printers also have features that prevent users from starting a print without enough ink or media in the machine, saving them from a mid-print panic. "Features like this are in place to keep the overall performance where it needs to be, and the user doesn't have to think about those kinds of things," Reamer said.

A major feature of Epson's newest flagship printers, the P9570 and P7570, is the addition of dedicated channels for matte-black and photo-black inks, said Reed Hecht, senior product manager at Epson. Whereas older models had a single set of nozzles that would switch between the two inks, the 9570 and 7570 can handle a glossy print, then a matte print, then another glossy print successively without switching, saving time, ink, and users' need to plan their print order ahead of time.

Another feature aimed at making things easy for users? A light. After noticing many of their customers using the flashlight on their cell phones to check on a print as it was coming out of the printer, the Epson team installed lights inside the 9570 and 7570 so anyone in the frame shop can easily walk by and make sure a print looks good—without pulling out their phone, Hecht said.

LOWER COSTS

Another major factor to consider when investing in a printer is operational costs. According to Barker, the falling

cost of ink in recent years has worked to drive down overall operational expenses. This improvement can result in real savings for retailers.

"Generally speaking, for someone who's purchasing a new printer and replacing an older one, it's not unrealistic for them to reduce their ink costs between 30 and 50 percent" depending on their specific circumstances, Barker said.

Some of the most common printers found in frame shops were purchased in the last five to 10 years. "Most of those shops are probably paying somewhere in the neighborhood of 36 cents per milliliter for ink," Barker said. "You can easily cut that cost in half by buying a current-generation printer. It's a significant savings."

When taken in combination with today's high demand for printing, these reduced operational costs can help retailers see a return on their investment within months of purchase.

Canon's PRO-4100, for example, ships with a set of 330 ml ink tanks already inside the printer. "The ROI can be pretty quick with this technology because that ink tank will take you a good way," Reamer said. "And if you think about printing something for a client and then framing it, that can be a very good source of income that can quickly pay for the cost of the printer in under a year. The long-term capability is pretty amazing."

PRINTING AND FRAMING: A PERFECT MATCH

Barker has seen countless framing business grow over the years after adding printing services to their repertoire. "If a frame shop owner doesn't own their own printer, they are missing a huge opportunity," he said. "If they are requiring customers to find another source for the print, that other source probably offers the same services the frame shop owner does. They're not only at risk of losing the revenue from the print, now they're also at risk of losing the mounting and framing revenue."

And virtually every person who walks through the doors of a frame shop has digital images on their devices—either photos they took or downloadable art prints purchased from online sellers like Etsy—waiting to be printed and framed. Shops that offer printing can jump on that extra business; shops that don't have to rely solely on physical prints being brought in.

"If I'm a frame shop owner without a printer, I can't take [a customer's image] in an email. I can't take a picture on a phone," Hecht said. "There's an opportunity for every



 The Canon PRO-4100 has dual-roll capability, meaning users can load two different types of media and the printer will automatically switch between rolls as needed.

frame shop owner to have this great printing technology combined with what they're historically good at—creating unique framing designs. You put those two together, it's a one-two punch."

In addition to factors like color, clarity, speed, usability, and operational costs, Barker encourages retailers to consider the level of customer support when making any major equipment purchase. A few things to look for in the company you are considering buying from are color management services, training, installation, support documents and resources, and a help line for when things go awry. That last one is critical; you want to work with a company that's there for you when you're struggling with a problem under the tight deadlines all retailers are familiar with.

Interested in upgrading your printer, but not sure if it's necessary? Some distributors, such as Digital Technology Group, allow their customers to email an image file and mail a physical print of the image using their current printer. The distributor will then print the same image on a newer printer and send both back for comparison.

"We like to tell people, 'The proof is in the print,'" Barker said. "Compare what your printer is capable of producing against what a current-generation printer offers, and see for yourself."

Whether you are looking to invest in a printer for the first time or want to upgrade from an older printer, you can't go wrong with the leading models on today's market. The ability to produce fine art reproductions and customers' photos in-house can help establish your business as a onestop shop for everything art and framing—a great incentive for people to return to you time and time again. **PFM**