

It's all in the Effects

Add Enhancements and Embellishments for High-Value Print

By Cassandra Balentine -

Adding special effects to digitally printed output makes print providers and the output they produce stand apart from the competition. Moving away from commodity print opportunities, print enhancement and embellishment capabilities add value to print.

Print enhancements are created inline on some digital presses, typically in the form of a fifth imaging station. Options range from spot colors to clear and white ink. Alternatively, print providers may choose to invest in a separate, post-finishing device that can perform a range of effects including spot UV coatings with a dimensional effect, foil applications, and embossing.

On the Rise

Overall, the demand for print effects comes from the need to differentiate and stand out. "To-day we live in a world where we are bombarded with marketing messages from every angle on a constant basis, so any way a physical communication media can transcend from only visual

to visual and sensual by adding various dimensions then it's certainly going to help any brand owner or marketer," says Lynn Kolevsohn, director of marketing, Scodix.

Print providers increasingly look to differentiate themselves and add value to basic print products in an effort to drive return on investment (ROI) from brands. "Embellishments are a high-value differentiator that create a sensory connection with the audience and allow the printer

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Sean Tobler, business development manager, H&B

to promote themselves to the creative designer," note Nick Bruno, president and Sean Tobler, business development manager, Harris & Bruno (H&B).

Print embellishment is popular. Rick Salinas, VP of marketing, Duplo USA, says this is simply because it works. "Study after study shows that a tactile experience is higher than print alone and much higher than online. One study showed the retention rate of print was 70 percent higher

than other channels," he offers.

Ragni Mehta, VP/GM, production xerographic offerings, Xerox

1., 3., & 4. Scodix recently developed a new glitter process that can be used in packaging applications. 2. The Xerox Iridesse prints up to six colors in a single pass with spot-on registration and the ability to embellish with decorative metallic, clear, and white inks.



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Corporation, points out that digital embellishment creates the opportunity for commercial printers to offer a unique "wow" factor for applications to their clients, differentiating themselves in the market and creating new avenues to drive revenue.

Kevin Zhou, sales director, Sunfung Tech, says spot UV coating and foil are becoming more familiar. This is because it helps customers not only see, but touch the printed result. "Foil makes printed output more shiny for label printing and packaging. It helps add value to the printed piece."

Common Effects

A variety of embellishments and enhancements are popular including foil and spot coating solutions, as well as specialty inks like gold and silver.

Tobler says any coating that gives a tactile effect like soft touch or grit is in demand. Glitter and scented coatings are also popular.

Kolevsohn points out that we're in the early days of learning how to fully exploit digital enhancement techniques as we are still trying to replicate traditional and existing methods. "For that reason, gold, silver, and colored foil applications—as well as high-build UV clear varnishes—are the most common."

Applications featuring gold, silver, and white embellishments are popular among Xerox clients, shares Mehta. Traditionally, applying gold and silver embellishments had to be taken offline, adding a time-intensive layer of complexity and cost. "With white, print service providers are able to print on colored and transparent media. Now, printers have the freedom to experiment with metallic and white to explore new ways to apply this feature to new and existing designs."

In the next few years, Zhou says we can expect to see more automated solutions for print embellishment, including spot UV coating, foil, die cutting, autofeed laminating, foil, printer, lamination, and automatic separations.

Return on Investment

Printed effects are generating a lot of buzz lately, and for good reason. With it, print providers are able to flex their creative muscles and bring in high premiums for embellished products. However, it is important that print providers consider the costs they will incur and how they will move that cost to their customers to ensure maximum profit potential.

An additional cost that printers and subsequently, clients, may incur is extra design or setup time required for an especially complex job. "Otherwise, Xerox iGen and Iridesse does not require special maintenance and does not charge additional click fees for embellishment printing," says Mehta.

Costs vary widely and depend on the type of equipment used. "Providers must educate themselves on the many studies that show how adding embellishments greatly improve the response rate of an advertisement or the perceived value of the

item being sold. I remember hearing of a university study that created highly embellished packaging on a fake coffee brand. then They put it right next to top selling brand. The results showed that the sale of the fake brand were as high as the top-selling brand. When buywere asked why they chose the fake brand, the response was that it looked high quality. If you can take response rates on a mail campaign from one or two percent to four or ten, I think most print buyers will easily pay more," comments Salinas.

Tobler agrees, adding that cost increases are dependent on the amount and type of embellishment. "A super intricate effect from a die cutter or coater may have higher tooling up costs in plates and dies, but ROI comes as run lengths and repeatable form numbers increase."

Kolevsohn believes cost increases to the print provider and in turn their customers are proportional to the value created. "In fact, at Scodix we often see cases where customers are able to significantly increase the selling price of an item with only a manageable increase in production. The more value that can be created helps this." Value is defined in many ways, not only by product differentiation but also time to market, last minute changes, and new designs.

Zhou points out that despite the cost, a lot of customers are willing to pay for good packaging.



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Standalone vs. Integrated

Print providers have options when it comes to adding embellishments and effects to print. Here, we detail the advantages and disadvantages of relying on inline capabilities on a press versus a standalone post-press option.

Print Engine

Creating effects inline boasts workflow benefits, as well as less room for registration error.

A streamlined workflow removes complexities from a multi-step process, especially one that requires manual intervention. "This sheds a level of technical know-how required by the operator, which is one of the reasons why Xerox iGen 5 and Iridesse does not require special maintenance and does not charge additional click fees for embellishment printing. Creative exploration is only limited by the amount of toner. This flexibility frees printers to take on any job, regardless of volume," shares Mehta.

Bruno and Tobler say the benefit of utilizing effects inline on a digital press is single-pass finishing. "The con is that digital presses are often slower than analog finishing devices. An inline solution would create less overall uptime as the presses have to be timed together. Also, high

throughput finishing equipment should service multiple digital presses, which is less efficient when put inline with one specific press. Also, multi-pass finishing processes would need to be bypassed through the press."

Zhou points out that thickness is often adjustable, which is good for completing labels and packaging inline. However, the print cost is high, and

requires daily maintenance.

Kolevsohn recognizes a few challenges to add complex processes inline. "Firstly and most obviously you need to match the speed of the two processes-print and enhancement. This typically isn't the case so you end up slowing down your printing press. Then there's the fact that enhanced products are typically a small proportion of anyone's production mix. Overall, it makes more sense to have a two to one or three to one ratio between print and enhancement. Finally, inline you would add your enhancement capability early in the printing press, at the end, or even after coating. It's a conundrum that's perplexed the best of manufacturing directors in our industry for years."

The only negative Salinas sees with this is establishing the sales channel that can effectively show why the added cost versus return makes the investment worth it. The ramp up must also come quick enough to cover the additional hardware costs.

Post-Print

When implementing printing effects post press, print providers benefit from reduced bottlenecks in printing and finishing, as well as more flexibility to create a one-of-akind experience. Post-press solutions allow each device to be as productive as possible and enable multiple-pass finishing without tying up a press, points out Bruno.

Kolevsohn says offline equals flexibility and no bottlenecks. "Sure, it means a sheet has to now pass through another process in order to get enhanced but for each sheet pass in an enhancement press we create value. It's not a volume/efficiency discussion in this case. You now free up your printing press to do the standard work at full speed and it is not hindered by slower enhancement processes."

"Post-press embellishment gives you many more options in creating an impactful piece," says Salinas. When using a
post-press solution for printing embellishment, users are able to die cut, specialty
laminate, emboss, deboss, and raised spot
UV coating—all to create a unique experience. "The downside is choosing which of
these solutions to implement for the best
ROI and the learning curve of adding these
new solutions."

Remaining on Top

It is important that print providers keep an eye out on the latest technologies, and make a point to strategically invest in new solutions that can add to their bottom line. Print enhancement capabilities represent a big opportunity, but the window is closing.

"Now is the time for printers and designers to partner, leverage their strengths, and begin building a strong foundation of clients before the market catches up and this technology is no longer as novel," says Mehta.

Salinas points out that print providers need to do more than just embellishment on paper, they truly need to be the print buyer's partner in coming up with a piece that creates the greatest impact for the given need.

"We have to remember that enhanced sheets are still a tiny proportion of what is printed every day, so mainstream is relative," says Kolevsohn. "Typically we will see more enhancement processes coming through as digital has an edge over analog in that it can simplify these complex



processes. Effectively it turns a black art into science."

Tobler believes print embellishments are a way that print itself can thrive as a viable marketing tool. "A solicitation email can be quickly and automatically dispatched to a junk folder. A direct mail piece from a luxury car manufacturer that smells like leather, however, at worst needs to be handled and engaged with before throwing away. At its best, one can be transported to the exciting feeling of sitting down in your brand-new vehicle."

Recent Advancements

Several equipment manufacturers support print enhancement and embellishment effects, inline, nearline, or offline within the digital printing process.

Duplo USA sees embellishment as a growth strategy for the industry. Over the next few years it plans to introduce a number of disruptive solutions that will help print providers succeed for years to come, shares Salinas.

In terms of products, he says the Duplo DFL-500 laminator/sleeker has been a runaway hit. "Sleeking provides a fast, easy way to add a foil finish to a printed piece," he offers. "Our DDC-810 Spot UV Coater is also popular. With its easy-to-operate PC controller, small footprint, and competitive price point, it allows us to have almost 50 successful installations in a short time."

H&B's ExcelCoat ZRS Sport/Flood Coater allows multiple-pass finishing in very tight registration utilizing common off-the-shelf liquid chemistries as well as specialty embellishment coatings.

Jetfx Inc. introduced the RAINMAK-ER at Print 18. The B2 format enhancement press produces spot varnish coating and digital image foiling that can be variable from one image to the next without the need for retooling. The solution is based on the same technology found in GEM, developed for HP Indigo single-pass printing and label enhancements. The company also developed

digital performance coatings to meet the packaging industry's requirements as well as commercial markets.

MGI offers a series of post-press embellishment solutions. Among its product line is the JETVarnish 3D. Designed

for operations with offset and/or digital presses up to 64x120 centimeter format, the JETvarnish 3D is the ideal solution for 3D or traditional flat spot UV coating on runs from one to thousands, providing printers with true value-added



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services. MGI first presented the JET-varnish at drupa 2008, customers of the series come from all graphic arts sectors such as offset commercial printers, digital printers, finishing houses, silk screen printers, specialty photo printers, and book publishers. The most popular jobs include book covers, brochures, business and invitation cards, and packaging.

The company also previewed new digital printing and embellishment technology last fall at the Paris All4Pack Exhibition. The AlphaJET Industrial Print factory combines inkjet printing with embellishment functions that include white UV pigment ink, inline substrate sheet printing, 2D/3D UV clear varnish ink, three curing methods—LED, IR, and UV, aqueous CMYK printing ink, and variable embossed foil decorating.

Scodix is dedicated to turning print into an experience. The company regularly presents new and unique applications. For example, it recently developed a new glitter product that can be used in packaging applications. It is a safe and secure solid finish with dramatic impact, says Kolevsohn.

The new Sunfung SF Raised Spot UV Coater offers spot coating and a foil fea-

ture in one pass. The Sunfung 370 Spot UV coater accelerates margin growths by creating greater value for products such as business cards, postcards, invitations, and direct mailers. The coater is a compact, design-driven solution that utilizes 360x1,440 dpi inkjet technology, UV lamp curing, and camera image registration to deliver production output with texture and depth by applying a gloss varnish to defined areas of the substrate.

The Xerox iGen offers benchmark brightness as well as opacity white dry ink performance in a single pass in addition to its extended gamut and clear dry ink capabilities.

The Xerox Iridesse prints up to six colors in a single pass with spot-on registration and the ability to embellish with decorative metallic, clear, and white inks.

Looking Ahead

We're just scratching the surface in terms of what can be done with print enhancement and embellishment technologies. Digital print providers get a leg-up on the competition when they are able to master and sell these products.

Increasing complex embellishments are requested by brands because they see ROI on their marketing spend. "It's that simple," says Tobler. "Every campaign that engages a print consumer's senses above and beyond ink on paper is a win for print as a leading marketing communication channel."

"The sky is the limit for print," says Salinas. "Brand owners recognize the value of print again. Online advertisement—although relatively inexpensive—has a very anemic response rate. Adblockers were created because consumers have developed a negative reaction to most online ads. A well thought-out marketing piece or package with embellishment is used to create a positive memory and a height-ened perceived value that will continue to drive people back to print."

"We predict that many more printers and packaging manufacturers will use either in house or outsourced digital enhancement processes and more than that, brand owners, design houses, and communication companies will be aware of these new applications and expect them so it's going to grow significantly," says Kolevsohn. She adds that a heavier level of industrialization and automation of these enhancement presses will allow them to be better equipped to handle larger quantities of production and at the same time, create value for the printer/converter.

Print providers add to profit margins with the help of print embellishment and enhancement solutions. Special embellishment produced post press allow for flexibility, while digital presses provide inline effects like metallic, white, and clear inks. **dps**

Effective Effects

COMPANIES MENTIONED See page 42 for more information.

| Company | Website | INF0# |
|------------------------------|------------------|-------|
| Duplo USA Corporation | duplousa.com | 140 |
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