To paint a picture of where the printing industry is and where it’s going, the SGIA Journal reached out to some of the most well-informed people we know: our trade press. In the following pages, editors and publishers from leading publications consider the challenges and opportunities facing print service providers (PSPs) as we head into 2020. One caveat: These are only a sampling of the many knowledgeable people in our industry’s trade press.

2020 Industry Predictions
Adrienne Palmer
Editor-in-Chief, Big Picture and Screen Printing magazines

As I look to 2020, I’m optimistic, excited and intrigued by what this industry will bring. The Big Picture team always asks “What can’t you print on?” And if you can’t print on it, you sure can wrap it. We’re continuously amazed by the unique output created by our readers, like vibrant wedding dance floor graphics, psychedelic hoverboard wraps, even public bathroom graphic takeovers. The wide-format digital print possibilities are infinite.

From conversations at events around the globe, engagement on our social media channels, phone calls, emails and, yes, sometimes snail mail, PSPs are constantly sharing how they’re expanding within this dynamic marketplace.

The challenge? Competition is fierce as access to the industry is widening due to entry-level machines and prices — we’ll be sure to see more and more businesses purchase wide-format machines to print their own trade show graphics, high school football banners and college wayfinding signage. PSPs will need to differentiate themselves by offering unique applications to their clients, testing new products, and receiving continuing education to stay not only on top, but in business.

Smart and savvy shop owners know that tried-and-true applications such as billboards and vehicle wraps are here to stay, but with the quality (and quantity) of digital printing capabilities, they also

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see the new demand in sectors like interior décor, soft signage, printable textiles and wide-format 3D printing. These four areas will continue to grow at a rapid pace; the applications are endless (think carpets, backlit graphics, couch cushions and massive props paired with point-of-purchase displays) and the ability to customize — what every person in 2019 and beyond wants — is simple.

As long as our wide-format digital print community of leaders and experts continues to embrace new technologies, products, applications and trends, we’ll never stop asking, “What can’t you print on?”

Become Even More Relevant
Bob Neubauer, Editor-in-Chief, In-plant Impressions

As we head into 2020, in-plant printers are focusing more than ever on adding new services to increase the value they offer their parent organizations. Increasingly, these new services center around wide-format printing.

In-plants are moving into flatbed or hybrid flatbed devices and expanding the range of applications they offer. Rigid signage is becoming a big opportunity, since companies and schools have a never-ending need to replace signage.

Along with this technology purchase often comes an automated contour cutter, for cutting out vinyl lettering, decals, coasters and many other products that previously had to be ordered from an outside service provider. For both this purchase and a flatbed printer, however, space limitations are the main barrier for many in-plants.

Latex wide-format devices are also becoming more popular with in-plants thanks to the growing demand for wraps.

In-plants’ customers have seen vehicles, windows, floors and other items being wrapped with graphics and they are looking for opportunities to do similar projects. In-plants often find that, once they add a latex wide-format device, they get much more work than they originally expected, leading to fast returns on investment.

Production inkjet printing is also finding its way into increasingly more in-plants as prices come down and the availability of cut-sheet inkjet devices increases. Insurance company in-plants seem to be leading the inkjet charge, though state government in-plants are close on their heels, with inkjet already installed at the country’s largest state printers. School district in-plants are another sector that is embracing inkjet, as it allows them to add inexpensive color to curriculum materials. The usually progressive higher-ed in-plant sector has been taking a wait-and-see approach to production inkjet, but as we approach 2020, expect to hear news of the first inkjet installation at a university.

The topic of outsourcing is never far from the minds of in-plant managers, and that will continue as we move into the new year. Though stories continue to surface of outsourcing providers whose poor service levels prompted organizations to terminate their contracts and restart their in-plants, outsourcing firms have not stopped targeting them. In-plants have responded by implementing more value-added services to weave themselves more solidly into the fabric of their organizations.

One up-and-coming service is coordinating the sale of branded promotional items for parent organizations. Interest in this was evidenced by the strong attendance at a PRINTING United in-plant forum on this topic, hosted by IPI. Some in-plants
are generating between $500,000 and $1 million in additional revenue from this service, while providing their parent organization the value of ensuring the accuracy of the brand on these items. This new service is expected to continue growing in 2020 and beyond.

The necessity of adding new services like these is underscored by a visible decrease in conventional printing volumes being reported by in-plants. Mainstays like course packs and directories continue to decline, though some shops report an uptick in marketing materials. Digital embellishment offers an opportunity to differentiate these materials and in-plants are starting to add digital presses with fifth color units for this purpose.

A Transformative Year for Packaging
Cory Francer, Editor-in-Chief, Packaging Impressions

The coming year is poised to be transformative for the packaging segment of the printing industry, as printers and converters will be faced with significant opportunities to grow and challenges to overcome.

Growth projections are positive in labels, folding cartons, flexible packaging and corrugated, and brands are increasingly viewing packaging as an essential marketing tool to differentiate their products. But a confluence of factors are emerging that are putting pressure on brands to move to market faster, increase their eco-friendly initiatives and maintain a strong physical touch point with consumers in an increasingly digital world.

While the packaging industry is evolving at a rapid clip, the good news for package printers — and printers looking to enter the packaging segment — is that the technology available to them is doing the same. Digital printing solutions have been garnering the most buzz as adoption continues to gain steam.

However, as intriguing as digital printing is, with its ability to churn out short runs and help brands develop creative campaigns through versioning capabilities, it will be even more interesting to see the direction digital finishing takes in 2020. As printers and converters have realized in recent years, just bringing digital printing on board does not fully solve the
production issues arising from an increase of short runs being sent through a conventional printing-based operation.

These short runs may have been able to be printed efficiently with digital, but the bottlenecks that occurred in the finishing and converting stages often negated the efficiency gains. Digital converting and embellishment equipment is on the rise, utilizing technology such as laser cutting, digital embossing and digital foiling, to better suit the needs of digitally printed output. It will be interesting to see if the industry shifts its mindset around digital, and if converters will start to assess their finishing needs prior to printing.

Though digital technology has grabbed its share of headlines and will continue to do so, it is also worth mentioning that the technological developments on the conventional side should also continue to impress. Across narrow-web and wide-web flexographic, and sheetfed offset presses, increased automation in setups, changeovers and color management will continue to aid printers and converters in an industry where the workforce challenges are universal.

However, where the packaging industry faces its biggest challenges, and in turn, its biggest opportunities, is in sustainability. No matter what a company’s mindset is on hot-button issues like climate change, there’s no denying that this is a sticking point for consumers, who are continuing to demonstrate their willingness to support, and even pay a premium for, products they perceive as eco-friendly.

The consumer backlash has particularly come against plastics, and the segments that utilize these materials will be challenged to find ways to achieve its cost and convenience benefits while dealing with its end-of-life issues. This will not be easy, and will likely require collaboration among converters, brands and even government officials, as recyclability, reusability and collection infrastructure are all going to be at play. The package printers and converters that prioritize innovation in sustainability will not only be doing the right thing for the environment, but will be at an advantage with brand owners, whose customers are demanding more attention to this issue.

Though these challenges may appear daunting, the opportunities in packaging are undeniable. Technological advancements across the board are lowering the barriers to entry in these segments, leading to more commercial printers taking on packaging capabilities, and package printers exploring new segments. It will be up to printers and converters to stay on top of evolving brand-owner demands, and utilize this technology to their advantage.

Direct Printing of Plastics

Jeff Peterson, Managing Editor, Plastics Decorating Magazine

Recent negative media attention directed toward the plastics industry would have the average consumer believe that all plastic products are bad. Of course, those involved in the industry know that simply isn’t true. Plastics used in automotive applications can replace metal parts for lightweighting purposes, reducing vehicle weight and improving fuel efficiency. Medical devices contain plastics because of properties that are biocompatible and allow for frequent sterilization, reducing infection rates. Plastics used in packaging applications can reduce or eliminate
secondary paper or cardboard packaging, particularly when direct printing processes are used for decorating and labeling. All of these applications often require decorative elements or identification marks.

Two technologies that continue to grow within plastics decoration are direct digital inkjet and in-mold decorating processes. Digital inkjet provides several benefits to the printer. First, no tooling is needed as is in other printing processes such as pad printing, hot stamping or screen printing. This provides the ability to do shorter runs at a more economical cost, while significantly reducing setup time. Also, digital inkjet is an on-demand process, which allows the printer to provide variable data on every part, whether different colors or part information, without a large outlay of extra costs. Applications can range from customized promotional products to tracking data on plastic containers.

In-mold decorating and in-mold labeling have been quite popular in Europe for some time, but much slower to catch on here in the States. However, these processes have grown in popularity and can be a wise choice for several applications. The main benefit, as one can imagine, is that in-mold decorating/labeling eliminates the secondary process of printing direct on the plastic or applying a pre-printed label. The label is applied in the mold during the injection molding process, which creates a strong bond between the plastic part and the decorative or label element that cannot easily be peeled off. Applications that work well for in-mold labeling include packaging applications for products that come in plastic containers/tubs or those for which the label or decorative element exist for security purposes.

The coming year will be interesting, but I believe there still is room for growth in the plastics decorating arena. This may depend on how the economy does as a whole, since the economy has a huge impact on market sectors such as automotive and consumer products. But, even with a slight slowdown in the economy, plastics manufacturing should stay relatively strong in the U.S., which directly reflects the opportunities for decorating and printing on plastic products.

Converging Market Segments are Redefining Commercial Printing
Mark Michelson, Editor-in-Chief, Printing Impressions

One trend I’ve witnessed during the nearly 38 years I’ve been covering the printing industry is the innate ability of commercial printers to evolve, often in lockstep, with ongoing technological advancements. Platesetters largely replaced offset platemakers. Desktop publishing eliminated the need for typesetting. In-house prepress departments made prepress service bureaus irrelevant. And, as the calendar shifts to the new year, digital inkjet and toner-based printing are proving to be better suited for a multitude of jobs that were historically output on lithographic printing presses.

Commercial printers have also diversified their products and services over the years to become more one-stop shops for their customer bases. This has included adding value-added services like graphic design, web-to-print and online storefront capabilities, database management, mail- ing, fulfillment, wide-format signage and the resale of promotional products. This ongoing diversification, however, typically aligned with, and complemented, existing services and customer bases.

But, just as the cost and high output volumes of web offset presses once protected printers with those capabilities from new competitors, digital toner and inkjet technologies are enabling commercial shops to enter completely new markets — and making one’s existing offerings more accessible to new competitors.

In other words, digital printing technologies have leveled the playing field, and are democratizing and breaking down the barriers that once existed between various types of printing operations and market segments. As a result, markets are converging, enabling all types of printers to acquire relatively lower cost digital output devices and finishing equipment in order to offer services and products well beyond their traditional scope.

That’s what makes today’s convergence phenomenon markedly different from the diversification we’ve long experienced. And, for commercial printers, especially — who have battled commoditization of many existing products and services — convergence trends that will continue throughout 2020 are creating new opportunities to explore, dissect and ultimately embrace higher-margin market opportunities that are well-suited for existing and new customer bases.

For example, commercial printers have been adding wide-format printers to produce signage and graphics for some time now. They’re also expanding into packaging — both for digitally printed prototypes and short runs, as well as for longer run offset jobs. And commercial shops are even
Commercial shops are even beginning to explore dye sublimation technologies for digital printing on apparel, textiles and soft signage.

A recent SGIA “Quarterly Industry Benchmarking Report” bears out this convergence market dynamic. For example, more than 63% of the commercial printers surveyed reported that graphics and signage production contribute 22.3% of their revenues, on average. Similarly, due to a lower cost of entry enabled by today’s digital printing technologies, continued expansion by commercial printers into digital packaging, garment, textile, promotional product and industrial printing applications will surely persist in 2020 — and beyond.

What Advice Would You Give Printers as They Prepare for 2020?

Deborah Corn, Principal, Print Media Centre

My marvelous friend and former curator of the Nobel Prize Museum, Tobias Degsell, imparted the best advice I heard in 2019 over a lovely dinner in NYC, and I am now passing it along to you: Join the improvement movement.

Tobias studies creativity and collaboration. He has concluded that people are averse to change, but they are open to improvements. Change comes with the baggage of uncertainty, while improvement starts with what everyone knows, and aims to make it better. That simple tweak to one word transforms the mission from fear to acceptance.

Here are a few suggestions for such improvements based on my conversations with more than 1,800 print customers who have attended Project Peacock, a traveling show-and-tell that brings new innovations and opportunities for print marketing directly to buyers, creatives and marketers from brands and ad agencies:

**Show, don’t sell.** Improve your customer spend and up your prospecting game by creating a cool presentation book or sample kit that showcases your in-house capabilities, funky finishing and any additional services you have outside access to. Make sure all your customers (and potential ones) know everything you can do and how you can help them.

**Feel the need for speed.** Project Peacock print customers have consistently gravitated to the ‘save time’ value proposition of digital print. Any time you can give them back is an improvement. If you are already digital printing, see where improvements can be made in your workflow and provide the closest to drop-dead file time as you can.

**Nip and tuck.** If your website isn’t responsive, if you don’t have social media, if you have social media but aren’t active, if you aren’t blogging and sharing information to attract customers to you, if your print shop is beige, if your office furniture is from last century, if your thinking is from last century — it’s time to get a facelift on your look and your marketing. Print customers from agencies and brands want to work with cool vendors. If you look old, you are old. If you aren’t communicating on the channels they use to market, you aren’t part of their world. Improvements here can open new doors. Take them seriously.

**Don’t try to make ‘fetch’ happen.** If you don’t understand this reference, there is a good chance you never saw the movie “Mean Girls.” Here is the gist: You cannot force things; they need to happen organi-
Print Long and Prosper!

What Can the Sign & Graphics Markets Expect in 2020?

Denise M. Gustavson, Editor-in-Chief, Wide-Format Impressions

Over the last few years, we’ve seen a lot of growth and optimism in the sign and graphics industry — energy that continues coming off the heels of PRINTING United in Dallas.

I expect three main markets will see increased interest and growth into 2020 — retail, decoration and general textiles. These areas are interesting in that they provide a place for PSPs to increase their core competencies and flex their muscles as they start to move into adjacent markets.

The key to all of these segments will be the level of expertise PSPs have with textiles. Before I explain why, let’s examine some of the trends we’re seeing.

Retail: Brands are facing increased pressure when it comes to competing with online retailers. Many have been forced to close brick-and-mortar stores as shoppers turn to their web browsers. At the same time, retailers are starting to reimagine the role their physical locations play in the customer experience.

Consumer engagement is key. Retailers need to provide consumers sufficient reason to visit a brick-and-mortar store location. For some, pop-up stores have been very successful, as brand ambassadors and loyalty members seek out these unique experiences to purchase limited-edition merchandise. For others, creating a unique look and feel within existing locations has been a winning strategy.

Decoration: For many within the sign and graphics space, interior decoration has been an easy adjacent market to move into. From ceilings to floors, digital print can provide interior designers with a unique tool to bring clients’ ideas to life. With digital inkjet printing, the solutions to print on materials such as glass, textiles, plastics and ceramics open new worlds of creative design.

Wide-format print technology has stimulated the trend of developing printed products for interior decoration. With digital technology, economical materials can be made to look like more expensive materials or techniques, such as exotic wood or wall frescos and murals.

So where do textiles come in? For a traditional sign and graphics producer, textiles more often than not refer to soft signage. But any good retailer knows that store windows and product displays are critical components of a comprehensive visual merchandising strategy, and fabrics are often a primary focus. Many retailers are choosing to create opulent, luxurious scenes, and fabric has become their material of choice. PSPs need to be able to work with these materials to ensure brands get the dramatic visual appeal they are looking for.

Silicone-edge graphics (SEG) is another area where retail and fabric go hand-in-hand. These graphics look great, and the textile prints give high-end, brilliant colors and can be completely nonreflective — unlike rigid plastic or PVC banner media. SEG frames and textiles can be broken down and shipped at a fraction of the cost compared to rigid plastic sign media. Also, once the SEG frame is installed, the textile faces can be replaced quickly and easily without a highly skilled installer.

And in the interior decoration space, fabric is playing a much larger role than ever before. One of the driving factors is that print buyers are starting to truly discover the power of customization. Instead of creating products and spaces around what’s available, they are realizing the potential of being able to bring their original vision to life. As digital textile printing technology continues to evolve and is coupled with the consumer desire for customized products — which they are willing to pay top dollar for — we will start to see more custom-upholstered products, from chairs and sofas to bedding and pillows.

Home goods is a huge market for digitally printed textiles, but the real challenge — apart from mastering the technology aspect — is how to offer these types of services to consumers.

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the textile industry, enabling manufacturers to eliminate the cost of makeready and simplify changeover. It also enables automation for improved efficiency and less waste. Supply-chain optimization is also an advantage, because textile and apparel manufacturing have historically been complex. Tools such as computer-aided design, improved color previewing and cloud computing can streamline the design-to-production process.

And even though global fast fashion is a high-volume business worth billions of dollars, print providers can find creative ways to support budding local designers, making the design and production of garments feasible in a local or regional area.

Mastering the textile printing process — which is different and a bit more complicated than traditional printing techniques — will enable print providers to truly expand their core competencies in the retail space. At the same time, it will allow them to flex their muscles and grow into exciting new markets, such as interior decoration and even fast fashion.

**Textile Printing Trends**

*Madelaine Thomas, Editor, WTiN*

There are number of trends shaping the textile printing industry at the moment. If we look at digital textile printing, customization is an influential market driver. Consumer demand is changing, and people want their products to be individual to them, whether that be in size or the print.

The rise of direct-to-garment (DTG) printing is testament to this. With DTG and small-scale roll-to-roll machines becoming increasingly popular, particularly in new business models such as microfactories and web2print businesses, the demand for customization is being satisfied. These new business models have moved the print industry away from large, minimum-order print houses to smaller-scale bespoke designers, even allowing the consumer to become the designer.

Another powerful market driver is sustainability. Although not a new challenge to the industry, never before has the need for sustainability in the print industry been more prominent. Pressure from governments (especially in Asia), brands and the consumer are calling on print houses to invest in more sustainable technologies and OEMs to innovate their latest offerings. Digital textile printing is considered to be much more sustainable than screen printing as it produces less waste and less ink, and is far more efficient.

However certain effects, such as metallic, cannot yet be commercially achieved with digital printing like they can with rotary screen printing. As a result of this, some companies such as Ichinose with its iugo machine, have developed hybrid solutions that allow for the intricate designs of digital without the extra screen costs, but also use screen printing to add on the desired added-value effect such as metallic inks. This can help overcome the barriers of both digital and screen printing, while utilizing the strengths of both methods.

Additionally, water-based inks are more environmentally friendly and are rising in popularity. The trend for water-based inks was noted at ITMA Barcelona with companies like Sensient showcasing their latest formulas.

When it comes to inks, the use of pigments is also a growing trend in the digital textile printing industry. They are more sustainable than other ink types, as they can print on any fabric and do not require any pre- or post-treatment. However, in industrial-scale textile printing, pigment inks have brought challenges of their own; due to high viscosity they are prone to clogging costly-to-replace printheads.

In terms of new technologies, especially in digital textile printing, cost is a challenge. Initial investment costs can be high in terms of machinery, and inks for digital printing are more expensive than screen printing inks. And as mentioned, for pigment inks you have to pay an even higher premium.

In 2020 we will see the uptake of more “internet of things” (IoT)-enabled technologies coming into play in the printing sector. From machine-to-machine communication to cloud-based solutions, IoT will make printing more efficient, more flexible and more sustainable.

We also expect to see the continuation of the nearshoring trend. As consumers demand their products faster, customizable and made sustainably, manufacturing closer to the consumer market is becoming imperative. Print houses are beginning to spring up in the likes of Eastern Europe — a cheap manufacturing hub for the European market — and similarly in South and Central America for their proximity to the U.S. market. As these regions continue to grow, large export markets in Asia will be forced to innovate and invest in new smarter, faster, more efficient technologies to keep up with the changing global print landscape.