

Monthly Print Market Update

April, 2026



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The One Question Drucker Would Ask Your Printing Company Today - Here's what I think. He probably would not be asking about your presses, or whether you hit your production targets. He wouldn't ask if you've won any industry awards. He probably would ask why your customers keep coming back. I believe that question is as relevant to a print company today, as it was when he first wrote this:

"The purpose of a business is to create a customer."

I'm a big Drucker fan and got to hear him speak at one of his last conferences. He had a way of getting to the critical questions needed to run a business well. One of my favorites is:

"A well-managed plant, I soon learned, is a quiet place. A factory that is "dramatic," a factory in which the "epic of industry" is unfolded before the visitor's eyes, is poorly managed. A well-managed factory is boring. Nothing exciting happens in it because the crises have been anticipated and have been converted into routine."

RRD Investments in Collectibles and Games Fuels Global Growth - RRD has expanded its global capacity and end-to-end capabilities for the production of trading cards and games in North America, Asia and Europe.

I included this as a general interest article....

Quad Reports First Quarter 2026 Results - Quad/Graphics, Inc. (NYSE: QUAD) ("Quad" or the "Company"), a marketing experience company that solves complex marketing challenges for its clients, reported results for the first quarter ended March 31, 2026.

Recent highlights

- Realized Net Sales of \$581 million in the first quarter of 2026 compared to \$629 million in the first quarter of 2025, representing a 7.7% decline in Net Sales or a 4.3% decline in Net Sales excluding the February 28, 2025, divestiture of the Company's European operations.
- Recognized Net Earnings of \$6 million, or \$0.13 Diluted Earnings Per Share, in the first quarter of 2026, compared to Net Earnings of \$6 million, or \$0.11 Diluted Earnings Per Share, in 2025.
- Reported Adjusted EBITDA of \$45 million in the first quarter of 2026 compared to \$46 million in 2025.

They're slowing the sales decline, as about ½ of the decline was from the discontinued European Operations and that is also helping keep the profitability steady after shedding the money losing ops.

Should Printing Companies Use ChatGPT? - The print industry has always been a landscape of rapid technological evolution, from the Gutenberg press to the advent of high-speed digital inkjet and automated finishing. Today, the conversation has shifted from hardware to software, specifically Large Language Models (LLMs) like ChatGPT. As print shop owners and production managers look for ways to

increase margins and improve throughput in a hyper-competitive market, a critical question arises: Should print companies use ChatGPT?

Good information on the best ways to use ChatGPT and some guardrails to caution its use as well.

Graphics Installation: 10 Trends to Understand – Graphics installation should never be an afterthought. Beyond the need to finish the job correctly and offer skills that help realize the needs of customers, installation has become increasingly technical. And — a complicating factor — installers may be on-staff, contractors, or both, creating management challenges.

- 1- Installation Is Not Just About Applying Vinyl
- 2 - Hybrid Print-and-Install Business Models Are Growing
- 3 - The Necessity for Trust in the Installer/Producer Relationship
- 4 - Controlling Production Improves Installation Outcomes
- 5 - In-House Installers Offer Cost Benefits and Control
- 6 - Independent Installers Provide Flexibility, Partnership
- 7 - Installation Skill Sets are Expanding Rapidly
- 8 - Economics Bringing Rise in Resurfacing Work
- 9 - Large Event Installations are High Risk, but High Reward
- 10 - Complex Fabrication Projects Offer Higher Margins

With the ever expanding WQide-format output, I thought this Primer would be useful.

Graphic Arts Employment in March Up Overall—Substantially Among Non-Production - March 2026 saw printing industry employment overall generally flat, up 0.3% from February. And while production employment was down 0.8%, non-production employment was up by 2.9%.

In-plant Staffing Practices and Trends – Overview of the challenges In-plants face – spoiler alert – filling open positions is their biggest challenge.

2026 International Sign Expo Delivers New Solutions, Strategies - The International Sign Association's International Sign Expo, held last week in Orlando, Florida, seemed to be quite successful. The energy was positive, aisles and booths were busy, and new equipment was introduced.

Coverage of the event.

Why Quantum-Resistant Printing is the New Gold Standard - As someone in the print industry, the phrase "data breach" has taken on a terrifying new dimension. For decades, the commercial printing industry viewed security through the lens of physical access: badge readers, locked trays, and "pull printing" to ensure a document wasn't snatched off the exit tray.

However, as of this year, the threat has migrated from the physical tray to the quantum “realm.” With the official release of enterprise hardware like the HP LaserJet Enterprise 5000 and 6000 series, the industry has reached a tipping point. Quantum-Resistant Printing (QRP) is no longer a niche requirement for defense contractors, it is a standard clause in almost every high-value commercial RFP (Request for Proposal).

As the bad guys keep pushing new ways of theft, this will go from an uncommon request to a normal requirement in the not-too-distant future.

Toshiba Expands High-Output Print Portfolio - Toshiba America Business Solutions is expanding its high-output print portfolio with the addition of Xerox PrimeLink color and monochrome light-production printers. The move bolsters Toshiba’s client-first, best-in-class, multi-vendor strategy, enabling organizations to build the most optimal print environment possible.

Some new distribution for Xerox.

Commercial Printing Establishments—2010–2023 - According to the latest, recently released edition of County Business Patterns, in 2023 there were 15,140 establishments in NAICS 323111 (Commercial Printing except Screen and Books). This represents a decline of 31% since 2010.

Even with all the consolidation that has taken place, small shops (1 to 9 employees) still comprise the bulk of the industry, accounting for 70% of all establishments. The largest shops account for only 8% of industry establishments with mid-size shops accounting for 22% of establishments. These percentages have not varied substantially since at least as far back as 2010.

Target Report: What in the World is Schutzschirmverfahren? - *Schutzschirmverfahren* (*shüts- ,shir-m fər-’fä-rən*): a German word literally translated as “Protective Shield Proceedings,” but in practical terms, it is the German equivalent of a self-administered, court-supervised proceeding under Chapter 11 of the US Bankruptcy Code.

For all the talk of the Printing business going away; while there is certainly a good deal of turmoil, it’s more of an adjustment of an ever changing landscape. Sounds like the usual activity of the business world.

Why the M&A Stage Seems Set for an Uptick in Tuck-ins - We’ve often written in these columns about the advantages that tuck-ins offer to owners whose businesses are best suited for this type of acquisition. A tuck-in is usually the right move when growth has plateaued, the owners have no next-generation successors, or the local market is too limited to generate new clientele. Size matters as well, with small firms more likely to be acquired as tuck-ins than larger ones.

I included this article to give you a view of what some of your smaller competitors are doing.

Digital Printing Technology and Trends Shine at EFI Ignite Event - Digital printing solutions spanning wide-format graphics, packaging, and textile applications were on display at EFI's Ignite event, held March 11 at the company's headquarters in Londonderry, New Hampshire. More than 40 companies were represented, including some that made the trip from international locations, along with multiple vendor partners spanning media, software, and cutting solutions.

Good update on EFI's Wide-format offerings.

December Printing Shipments Rallied to End the Year – December 2025 shipments came in at \$7.21 billion, a slight rebound from November's abysmal \$7.11 billion.

December may have rallied, but it was still a poor year overall.

Contents

The One Question Drucker Would Ask Your Printing Company Today	7
RRD Investments in Collectibles and Games Fuels Global Growth	10
Quad Reports First Quarter 2026 Results	12
Should Printing Companies Use ChatGPT?	15
Graphics Installation: 10 Trends to Understand	19
Graphic Arts Employment in March Up Overall—Substantially Among Non-Production	24
In-plant Staffing Practices and Trends.....	26
2026 International Sign Expo Delivers New Solutions, Strategies	27
Why Quantum-Resistant Printing is the New Gold Standard.....	31
Toshiba Expands High-Output Print Portfolio	36
Commercial Printing Establishments—2010–2023.....	38
Target Report: What in the World is Schutzschirmverfahren?.....	41
Why the M&A Stage Seems Set for an Uptick in Tuck-ins	45
Digital Printing Technology and Trends Shine at EFI Ignite Event.....	48
December Printing Shipments Rallied to End the Year.....	51

Printing Impressions – April 29

The One Question Drucker Would Ask Your Printing Company Today



Credit: Getty Images by Nitat Termmee



By [Mike Philie](#)

Here's what I think. He probably would not be asking about your presses, or whether you hit your production targets. He wouldn't ask if you've won any industry awards. He probably would ask why your customers keep coming back. I believe that question is as relevant to a print company today, as it was when he first wrote this:

"The purpose of a business is to create a customer."

You see, your quality and service and turnaround times are important. I hear those from most companies. And I'm not saying these are not important, I'm just saying you may need more to stand out from the pack.

We've Got the Priorities Backwards

The strategy that I see in most businesses, is usually built around their capabilities. What equipment they have. What they can produce, and how fast they can turn projects. And those things matter a great deal; I'm not dismissing them. But when your whole strategy is organized around what you can do, you end up in a conversation with customers that is essentially about your shop floor. And once you're in that conversation, you're competing on specifications and price and somebody else's shop floor. Every time.

This isn't only about doing exceptional work, or generally world class work. I've seen some excellent companies that struggle to make the money they deserve. Because guess what, technology and equipment has allowed everybody to produce great work on almost any given day. And when two companies do great work, the customer starts to look at price. I don't look at that as a production problem; I look at that as a strategy opportunity.

Great work is the price of admission these days, and not the sole source of advantage.

So, if it's not about capabilities, then what is it? Drucker's answer is the customer. The customer is as he puts it, the soul of the enterprise. They are not a recipient of your work or line on the P&L. They are the soul. The reason the whole thing exists, and if that's actually true, then ask yourself does your strategy reflect that?

The Customers Who Don't Come Back

We all have lived at either as a customer or as a supplier. We know that not all customers will call to complain. If they did, at least they're giving you a chance to make things right. The customers I worry about are the ones that just fade away.

They don't reduce orders all of a sudden, it happens gradually. Before you know it, jobs start to go somewhere else, then one day you realize you haven't heard from them in several months. And when you call to check in, they're polite, but the work has moved on.

They didn't leave because your quality dropped or you missed a deadline. They left because the relationship felt like a transaction. I mention this to companies all the time: When was the last time you brought an existing customer a new good idea, unsolicited? Face it, when you're chasing them as a prospect, you're doing that all the time. But once they become a customer, the idea spicket closes. Now don't get me wrong, when they call with a question or an idea or challenge, you are all over it. You're Johnnie-on-the-spot: ready and willing to help. Face it, you do a great job of doing that. But what are you doing when they don't call?

I believe that's what happens when your relationship with a customer is built around the work rather than around them and what they're really trying to accomplish. It's fragile and can always be re-priced or replaced by someone.

A Question Worth Asking

In a while being customer focused is a lot more than just a saying, we need to put it in a practical sense. Understanding what problem your customer needs solved before the print job ever starts is a great place to begin this process. Not what they're ordering or how many they're ordering, not what substrate they are asking for, but what are they really trying to accomplish? What does success look for them? (Not the print job, but the outcome the print job is supposed to produce.)

I believe that if you can answer that question for your top 10 customers, in detail, you're in a completely different position than a company that can't. You're no longer a vendor, you're no longer supplier, you've really become that trusted advisor.

Mike Philie helps owners and CEOs in the Graphic communications industry validate what's working, identify what needs to change, and create a practical path forward.

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Printing Impressions – April 29

RRD Investments in Collectibles and Games Fuels Global Growth

RRD has expanded its global capacity and end-to-end capabilities for the production of trading cards and games in North America, Asia and Europe.

Fueled by multi-million dollar capital investments, RRD has increased capacity at key facilities, upgraded and opened design and innovation centers and invested in new equipment and technologies. With a 37-year legacy in the collectibles industry, the world's most popular and emerging trading card and board game brands rely on RRD as their behind-the-scenes partner to design, print, kit, package, warehouse and fulfill trading cards, games, game pieces, toys, manuals and other collectible items at scale.

"RRD's expansion reflects the growth of the collectibles market and the specialized technology and skills required to produce these products with the highest quality at scale," said Lisa Pruett, President, RRD Integrated Packaging, Labels and Supply Chain. "By investing in advanced manufacturing, innovative design capabilities and a highly skilled workforce, RRD gives brands a single partner capable of bringing complex collectibles and games to market anywhere in the world."

A Unified Global Infrastructure

RRD is the only United States-based manufacturer with global, end-to-end, in-house capabilities that support the complete product lifecycle. A global network of design innovation hubs and manufacturing facilities spans seven countries across North America, Asia and Europe.

The company's vast North American manufacturing power and expanded Asian and European operations provides a seamless bridge between design concept, complex production and global retail distribution.

Protecting the "Chase" Through Security and Innovation

RRD serves a diverse set of brands and products in the collectibles industry, including trading card games, sports, memorabilia and entertainment cards, tabletop games and more.

Specifically for its trading card clients, RRD leverages its technology platform to address some of the industry's greatest challenges of authenticity and scarcity.

- **Rarity integrity:** Using proprietary data systems, RRD manages complex randomization and drop-ratio programming to ensure the mathematical integrity of chase cards.
- **Physical and data security:** From design to distribution, RRD employs a robust prevention, detection and correction security model to protect its clients most sensitive intellectual property.

- Advanced anti-counterfeiting:RRD utilizes holographic foils, unique serialization, ink technology and other techniques to protect client intellectual property.
- Sustainable packaging:The expansion continues RRD’s patented hourglass-shaped paper sleeve, a sustainable alternative to plastic blister packs.

For more information on RRD’s collectibles and gaming capabilities, visit rrd.com/industries/consumer-and-retail/collectibles.

[Source: RRD](#)

Printing Impressions – April 29

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Quad/Graphics, Inc. (NYSE: QUAD) (“Quad” or the “Company”), a marketing experience company that solves complex marketing challenges for its clients, reported results for the first quarter ended March 31, 2026.

Recent highlights

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- Recognized Net Earnings of \$6 million, or \$0.13 Diluted Earnings Per Share, in the first quarter of 2026, compared to Net Earnings of \$6 million, or \$0.11 Diluted Earnings Per Share, in 2025.
- Reported Adjusted EBITDA of \$45 million in the first quarter of 2026 compared to \$46 million in 2025.
- Achieved \$0.25 Adjusted Diluted Earnings Per Share in the first quarter of 2026, an increase of 25% from \$0.20 per share in 2025.
- Recognized at the Gramercy Institute’s Financial Service Strategy Awards, demonstrating impact of Quad’s integrated direct marketing work.
- Repurchased 0.2 million shares of Quad Class A common stock in 2026, bringing total repurchases to 7.6 million shares since initiating the program in 2022, representing approximately 13.6% of shares outstanding as of March 31, 2022.
- Returned \$7 million to shareholders through \$6 million of regular cash dividends and \$1 million of share repurchases.
- Declared quarterly dividend of \$0.10 per share payable June 5, 2026.
- Reaffirms full-year 2026 financial guidance.

Joel Quadracci, Chairman and Chief Executive Officer of Quad, said: “Our first quarter results were in-line with our expectations, and we remain on track to achieve our full-year 2026 guidance. We remain focused on achieving our long-term growth and margin objectives while maintaining disciplined cost management despite macroeconomic challenges, including continued postage rate increases and cost pressures in our supply chain stemming from the ongoing conflict in the Middle East.

“We are making strategic investments in innovative marketing solutions and high-caliber talent to expand our offering and strengthen client relationships. We are seeing strong momentum in Quad’s audience strategy services, powered by our proprietary, household-based data stack. Our formalized Direct Marketing Agency combines audience services with pre-market testing and analysis to drive more effective mail prospecting. Similarly, our Rise media agency brings together data-driven intelligence with AI-powered insights to deliver customized omnichannel media strategies that help clients achieve measurable business outcomes.

“Operationally, we are providing clients with multiple optimization solutions, including advanced co-mailing capabilities, to generate significant savings that help reduce the impact of rising postage costs. We are further strengthening our cost structure by investing in automation and adopting AI-enabled tools, which are improving productivity, speed and agility across our platform. These efforts further differentiate Quad in a competitive marketplace.”

Added Tony Staniak, Chief Financial Officer and Treasurer of Quad: “We are reaffirming our 2026 full-year financial guidance with an improved sales decline rate and essentially flat Adjusted EBITDA and Free Cash Flow compared to 2025, representing a key step on our path to long-term growth. We are closely monitoring the current business climate which continues to present uncertainty, driven by factors including persistent inflationary pressures, evolving global trade dynamics, geopolitical tensions and cautious business spending. As we have demonstrated in prior periods of disruption, we remain agile and ready to adapt to shifting demand. While allocating capital to fuel long-term growth, we are also returning capital to shareholders through our quarterly dividend of \$0.10 per share and we have repurchased \$1 million of Quad shares year-to-date. We expect to remain opportunistic in terms of future share repurchases.”

First quarter 2026 financial results

- Net Sales were \$581 million in the first quarter of 2026, a decrease of 7.7% compared to the same period in 2025. Excluding the 3.4% impact of the divestiture of the Company’s European operations, Net Sales declined 4.3%. The decline in Net Sales was primarily due to lower print volumes and lower agency solutions sales.
- Net Earnings were \$6 million, or \$0.13 Diluted Earnings Per Share, in the first quarter of 2026 compared to \$6 million, or \$0.11 Diluted Earnings Per Share, in the first quarter of 2025. The improvement was primarily due to lower selling, general and administrative expenses, lower interest expense, lower depreciation and amortization, and benefits from increased manufacturing productivity, partially offset by the impact from lower Net Sales, increased restructuring, impairment and transaction-related charges, net, and increased income tax expense. Diluted Earnings Per Share were also higher due to the impact of share repurchases and lower dilutive equity incentive instruments.
- Adjusted EBITDA was \$45 million in the first quarter of 2026, compared to \$46 million in the same period in 2025. The decrease was primarily due to the impact of lower Net Sales partially offset by lower selling, general and administrative expenses, and benefits from improved manufacturing productivity.
- Adjusted Diluted Earnings Per Share was \$0.25 in the first quarter of 2026, as compared to \$0.20 in the first quarter of 2025.
- Net Cash Used in Operating Activities was \$94 million in the first quarter of 2026, compared to \$89 million in the first quarter of 2025. Free Cash Flow was negative \$107 million in the first quarter of 2026 compared to negative \$100 million in the first quarter of 2025. The decline in Free Cash Flow was primarily due to the increase in Net Cash Used in Operating Activities mainly from higher inventories and a \$2 million increase in capital expenditures. As a reminder, the Company historically generates most of its Free Cash Flow in the fourth quarter of the year.

- Net Debt was \$427 million at March 31, 2026, as compared to \$308 million at December 31, 2025, and \$463 million at March 31, 2025. Compared to December 31, 2025, Net Debt increased primarily due to the negative \$107 million Free Cash Flow in the first quarter of 2026.

Dividend

Quad’s next quarterly dividend of \$0.10 per share will be payable on June 5, 2026, to shareholders of record as of May 21, 2026.

2026 guidance

The Company’s full-year 2026 financial guidance is unchanged and is as follows:

Financial metric	2026 goals
Adjusted Annual Net Sales Change ⁽¹⁾	1% to 5% decline
Full-Year Adjusted EBITDA	\$175 million to \$215 million
Free Cash Flow	\$40 million to \$60 million
Capital Expenditures	\$55 million to \$65 million
Year-End Debt Leverage Ratio ⁽²⁾	Approximately 1.5x

⁽¹⁾ Adjusted Annual Net Sales Change excludes the 2025 Net Sales of \$23 million from the Company’s European operations, divested on February 28, 2025.

⁽²⁾ Net Debt Leverage Ratio is calculated at the midpoint of the Adjusted EBITDA guidance.

[Source: Quad](#)

Printing Impressions – April 28

Should Printing Companies Use ChatGPT?



By [Alyssa Summers](#)



The print industry has always been a landscape of rapid technological evolution, from the Gutenberg press to the advent of high-speed digital inkjet and automated finishing. Today, the conversation has shifted from hardware to software, specifically Large Language Models (LLMs) like ChatGPT. As print shop owners and production managers look for ways to increase margins and improve throughput in a hyper-competitive market, a critical question arises: Should print companies use ChatGPT?

The answer is a resounding "Yes," but with significant caveats. While ChatGPT offers unprecedented opportunities for streamlining customer communication, marketing, and internal documentation, it also introduces specific vulnerabilities. Mismanaged AI use can lead to data breaches, technical production errors, and damaged client relationships.

In this comprehensive guide, we will explore how the print industry is currently adopting AI, identify the "easy wins," highlight the high-risk zones, and define the boundaries where AI should never be allowed to cross.

How Printing Companies are Currently Using ChatGPT

Forward-thinking print service providers (PSPs) are moving beyond viewing ChatGPT as a novelty and are beginning to integrate it into the "front-end" of their business. Most current usage falls into three main categories:

1. Enhanced Customer Communication

Customer service teams are using ChatGPT to draft professional responses to complex inquiries. For instance, if a client asks why a specific Pantone color cannot be perfectly replicated on a textured linen substrate, a CSR can use ChatGPT to draft a clear, technical, yet polite explanation. This reduces the time spent on "email gymnastics" and allows staff to focus on production-heavy tasks.

2. Marketing and Content Creation

Marketing for print is notoriously difficult because it requires explaining physical processes in a digital world. Print shops are using AI to generate SEO-optimized blog posts, social media captions for showcasing recent projects (like a complex die-cut brochure or a foil-stamped invitation), and personalized email campaigns. By feeding the AI specific details about their finishing capabilities, they can generate compelling sales copy that resonates with graphic designers and agency buyers.

3. Administrative Efficiency

From drafting internal memos to summarizing long meeting notes regarding equipment upgrades, ChatGPT acts as a force multiplier for the administrative side of a print shop. It allows smaller "mom-and-pop" shops to project the professional image of a much larger corporation.

The 'Easy Wins': Low Risk, High Reward

For print companies hesitant to dive into AI, there are several "low-hanging fruit" use cases that provide immediate value with minimal risk:

- **Drafting Standard Operating Procedures (SOPs):** Every print shop has "tribal knowledge," specific ways to load a certain substrate or clean a specific print head. ChatGPT can take a rough, bulleted list of steps and turn it into a professional, easy-to-read SOP manual for new hires.
- **Subject Line and Headline Generation:** Use AI to generate 10 variations of an email subject line for your monthly newsletter to see which yields the highest open rate.
- **Job Postings:** Quickly create detailed job descriptions for specialized roles like "Prepress Technician," "Bindery Operator," or "VDP Specialist" based on industry standards.
- **Summarizing Feedback:** Paste anonymous customer reviews into the interface to identify common themes (e.g., "Our quality is praised, but customers find our turnaround time on quotes too slow").

High-Risk Use Cases: The Security Concerns

Security is the most significant hurdle for any print company using a public AI interface. When you type information into the standard ChatGPT interface, that data may be used to train future iterations of the model unless you are using specific enterprise-grade privacy settings or "Temporary Chat" modes.

1. Client Proprietary Data

Print companies often handle sensitive intellectual property. If a client sends over an unreleased marketing plan or a confidential internal document to be printed, never upload that text into ChatGPT

to "summarize" or "edit" it. If the AI ingests this data, fragments of that proprietary information could theoretically appear in responses to other users globally.

2. Mailing Lists and PII (Personally Identifiable Information)

This is the single most dangerous mistake a print company can make. Uploading customer mailing lists (Excel or CSV files) to ChatGPT for "cleaning" or "formatting" is a massive breach of PII. This can violate GDPR, CCPA, and other privacy regulations, potentially leading to lawsuits and the loss of mail-house certifications.

3. Internal Pricing Formulas

Uploading your company's internal pricing spreadsheets to ask the AI to "find areas for better margin" exposes your competitive advantage. If that data is ingested into the public model, you are essentially training the AI on how your business competes.

The 'Error Zone': Use Cases Prone to Failure

Print is a game of millimeters, microns, and precise chemistry. This is where ChatGPT's "hallucination" problem becomes a liability. **ChatGPT is a language model, not a math or engineering engine.**

Technical Specifications

Asking ChatGPT to calculate "the correct spine width for a 300-page book on 80lb gloss text" is risky. While it might provide a formula, it often makes subtle errors in decimal placement or fails to account for the specific "bulk" of a particular paper brand. In print, a mistake of 0.03 inches is the difference between a professional perfect-bind and a rejected job.

Prepress and Software Troubleshooting

Relying on AI to give advice on "how to fix a transparency flattener error in Acrobat" or "how to set up a spot varnish layer in InDesign" can lead to outdated or flat-out wrong instructions. AI may suggest a workaround that worked in a 2018 version of the software but will corrupt a modern PDF/X-4 workflow.

Areas Where the ChatGPT Interface Should NOT Be Used

While AI APIs can be integrated into secure workflows, the public ChatGPT interface should be strictly off-limits for the following areas:

1. Legal Contracts and NDAs: While AI can review a contract for "general tone," it should never be the final word on Non-Disclosure Agreements or Service Level Agreements (SLAs). The nuance of print-specific liability (such as "industry-standard over/under-run percentages") is often missed by general AI.
2. Detailed Financial Audits: Keep your P&L statements and balance sheets out of the public interface.
3. Direct Variable Data Processing (VDP): Never use the interface to manage the logic for variable data jobs (e.g., matching names to specific discount codes). The risk of data misalignment is high, and the security risk to the customer's database is even higher.

The Strategy: 'Human-in-the-Loop'

The successful print company of the future will not replace its staff with AI; it will augment them. The "Human-in-the-Loop" (HITL) model is the only responsible way to use ChatGPT in print.

This means:

- **Verification:** Every piece of output, whether a technical explanation to a client or a marketing post, must be verified by a human subject matter expert.
- **Data Masking:** If using AI to help draft a response to a customer complaint, employees should be trained to remove names, order numbers, and specific company names before pasting the text into the AI.
- **Policy Creation:** Every print shop needs a written "AI Usage Policy" that clearly outlines what can and cannot be shared with an LLM.

So Should You Use It?

So, should print companies use ChatGPT? Yes. It is a powerful tool for overcoming "blank page syndrome" in marketing, improving the tone of customer service, and organizing internal knowledge. However, it is not a prepress engineer, a lawyer, or a secure data vault. By focusing on the "easy wins" and maintaining strict boundaries around client data and technical math, print providers can use AI to sharpen their competitive edge without compromising the integrity of their craft.

The goal is to use AI to handle the language, while your experts handle the print.

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Wide-format Impressions – April 21

Graphics Installation: 10 Trends to Understand

Two seasoned wide-format professionals share current realities.



A vinyl wall wrap installed at a fast casual Italian restaurant, which has dozens of locations across the U.S. Using a resource like the 3M Preferred Installer network to find a window, walls, and floors installer gives Atchley Graphics confidence the installer can handle larger graphic applications like this. | Credit: Atchley Graphics



By [Dan Marx](#)

Graphics installation should never be an afterthought. Beyond the need to finish the job correctly and offer skills that help realize the needs of customers, installation has become increasingly technical. And

— a complicating factor — installers may be on-staff, contractors, or both, creating management challenges.

To examine graphic installation today, *Wide-Format Impressions* spoke with [Kenneth Burns](#), president of [Axis Graphic Installations](#) (headquartered in North Lauderdale, Florida) and Capital INK Corp. (Hyattsville, Maryland), as well as Pete Kouchis, president of Visucom Signs and Graphics (Mokena, Illinois). Through these conversations, the evolving relationship between printing and installation came into sharp focus.

Both are PRINTING United Alliance members, and both have built businesses that include wide-format production and installation. Their experiences reveal both a changing look for installation, its staffing, and the skills needed to deliver complete solutions

1- Installation Is Not Just About Applying Vinyl

Installation has evolved far beyond basic decal application. The skillset has grown. Today, installers often also handle dimensional letters, LED backlit signage, resurfacing films, rigging systems, architectural wraps, and complex environmental graphics.

Installation, these professionals say, now requires craftsmanship, mechanical aptitude, and advanced troubleshooting skills. Installers must understand substrates, adhesives, power access, and sequencing. It's no longer a narrow trade — it's a multifaceted profession.

Regarding the most basic skills for installation, Kouchis describes it this way: "If you have a general aptitude of being somewhat mechanically inclined ... and you're good with hand tools and laser levels, then you're okay."

2 - Hybrid Print-and-Install Business Models Are Growing

While installation-only companies continue to provide a valuable service, the wide-format segment has seen significant growth in hybrid businesses that both print and install.

Describing this trend, Kouchis observes, "I don't know that I would say that there are less install-only companies, but there are more hybrids."

The advantage of hybrid models is that they offer diversification, as well as a strategic hedge against volatility in the wide-format space. When installation work slows, then production may carry the load and vice versa. Kouchis and Burns say this model also provides better process control and oversight of the entire project.

3 - The Necessity for Trust in the Installer/Producer Relationship

One common concern among print providers is that independent installers who also possess wide-format printing capabilities may seek to leverage their clients' customers. About this concern, and to dispel the tension that has existed around it, Kouchis notes, "It took many, many years to build a

reputation and trust with people, and that can be destroyed in seconds just by getting greedy for a minute.”

Part of the concern is that installers often know client contacts, materials used, and their customers’ pricing strategies. Without demonstrated integrity, the trust between producer and installer can collapse quickly. The most successful installation businesses, Burns and Kouchis say, are built on restraint and professionalism. Trust, once earned, can result in long-term collaboration and even direct communication with end customers, without crossing relationship boundaries.

4 - Controlling Production Improves Installation Outcomes

Burns says his company started in wide-format production after years of being an installation-only provider, and partially driven by his own questions about production. He explains, “Being an installer, you get all of the good and the bad production stuff. I just had a curiosity. I wanted to know, is it really as hard as [wide-format producers] are making it sound?”

What Burns discovered was that production is challenging, but so is installation. He says he has developed a better understanding of production equipment inconsistencies, material variations, and process gaps that can ultimately affect field performance. Hybrid operators, he says, can benefit because they can anticipate installation requirements — such as labeling panels clearly, packaging carefully, and selecting appropriate materials — during production.

When printers “produce as if it’s going to be installed,” Burns says, then everyone wins.

5 - In-House Installers Offer Cost Benefits and Control

Many larger graphics producers serving certain markets often have installers on payroll, and the appeal of doing so is rather straightforward. Burns describes the benefits: “Cost, that’s number one ... cost and control.”

Burns and Kouchis share that hourly employees are generally less expensive than independent contractors. They can be deployed quickly, reassigned to do other work between projects, and can be trained to meet the internal standards of the producer. This model works well, they say, when there is enough volume to keep installers busy full-time.

Smaller or mid-sized shops, however, may struggle to keep full-time installers busy. When installers are, for instance, cutting vinyl to fill downtime, morale and efficiency can suffer. They’re not doing what they were hired to do.

6 - Independent Installers Provide Flexibility, Partnership

Conversely, independent installation teams offer something that’s difficult to achieve “on the payroll”: scalability and deep specialization, particularly for products like national rollouts, regional surge, and large events.

Kouchis says strong partnerships between producers and independent installers can create responsiveness and strong loyalty. The advantage, he says, “is building a relationship with a solid team that you can build a two-way respect.”

Installers who feel respected, he says, will prioritize those producers. As a result, they can help the producer troubleshoot collaboratively and often can act as trusted field representatives.

For producers without steady installation volumes, or those who face unpredictable demands or the need for out-of-left-field techniques and knowledge, Burns and Kouchis say, independent networks can be a powerful asset.

7 - Installation Skill Sets are Expanding Rapidly

Both Kouchis and Burns describe how installation responsibilities have broadened. Kouchis notes a growing demand for LED backlit dimensional signage: “They want their pin-mounted logos, but now they want them backlit. So, now we also have become experts in fishing low voltage wire up walls into ceilings.”

Burns highlights the growth he’s encountered in resurfacing films — high-quality, high-durability films that can be used to, for instance, apply simulated woodgrain to doors. “In the last two years we’ve really started doing a lot with that ... that’s become about 20% of our installation mix now.”

Some resurfacing films, architectural treatments, electrical work, and specialty materials require certification, additional training, and careful process management. Installers and installing producers must decide where to draw the line on what they offer. Burns, for example, avoids electrical work beyond a certain scope to keep his team focused, comfortable, and within their skill set.

8 - Economics Bringing Rise in Resurfacing Work

Resurfacing films initially struggled to gain traction in the U.S., Burns says, but recent economic conditions changed that. He explains, “I think the economy in America just needed to go down to a point where people started looking at their bottom lines a little bit more.”

Replacing hundreds of hotel doors, for instance, is both expensive and disruptive. Wrapping those surfaces can extend their life at a much lower cost and with less downtime. Environmental considerations also play a role. Resurfacing scuffed but fully functional doors, as an example, prevents them from becoming landfill waste, minimizing environmental impact.

Installers who invested early in training and certification for resurfacing are now seeing steady growth in this segment, Burns and Kouchis report.

9 - Large Event Installations are High Risk, but High Reward

For large, high-profile sports and other events — the Super Bowl easily comes to mind — large-scale graphics installation have become nearly essential. But that doesn’t mean they’re easy. Both Burns and

Kouchis report these production/installation projects offer significant visibility and profitability but are performed under intense pressure. They are not for the faint-of-heart. “Nothing else matters,” Burns says. “It has to happen on this day, on this time, no matter what.”

Kouchis describes how, for these types of jobs, oversights in production can lead to deep challenges that leave installers scrambling. Sometimes, he says, “[producers] hand us a messed up cake and a can of frosting and say, ‘Okay, make it look pretty, because the party’s in an hour.’”

For these types of jobs, weather, materials, and logistics can all become complicating factors. And because deadlines cannot move, these projects require experienced installers, strong communication, and exceptional problem-solving skills.

10 - Complex Fabrication Projects Offer Higher Margins

As more wide-format producers move into fabrication to create, for example, custom retail displays, experiential builds, and branded environments, installation complexity has increased. But with that complexity comes opportunity. Burns says, “For those installers that are willing to put in that extra work ... the margins are a lot higher.”

Kouchis says fabrication-informed projects often require much more than simple installation. “It comes to a whole new level of involvement between the installer and the producer.”

These projects may require surveys and early coordination with installation teams before fabrication even begins to prevent costly errors requiring rework. When executed well, however, these projects move installers beyond commodity pricing and into premium service territory.

The Installation Advantage

Burns and Kouchis both agree on one central truth: installation is not simply the last step in a project. It is often the most visible and critical one. And whether a graphics producer used on-staff or independent installers, success depends on strong alignment throughout the project. As a hybrid producer/installer, Burns says, “Knowing both sides of the fence is awesome because now you can deliver a process that works for all parties.”

For graphics producers weighing whether to hire in-house installers, rely on independent partners, or build hybrid capabilities, the answer may not be either/or. It may be a carefully balanced combination — grounded in trust, training, and mutual respect.

For many wide-format producers, strong installation has evolved into a defining competitive advantage — a point of differentiation. And those who treat it as such will position themselves for success.

What They Think – April 24

Graphic Arts Employment in March Up Overall—Substantially Among Non-Production

March 2026 saw printing industry employment overall generally flat, up 0.3% from February. And while production employment was down 0.8%, non-production employment was up by 2.9%.

Friday, April 24, 2026

Employment in thousands of workers	February 2025	February 2026	Y/Y Change	March 2025	March 2026	Y/Y Change
Printing, all	346.5	339.8	-1.9%	345.5	340.8	-1.4%
Printing, production	238.6	236.3	-1.0%	238.2	234.3	-1.6%
Printing, less production	107.9	103.5	-4.1%	107.3	106.5	-0.7%
Signs, all	75.8	77.2	1.8%	77.1		
Signs, production	41.9	41.2	-1.7%	42.8		
Signs, less production	33.9	36.0	6.2%	34.3		
Converted paper products	272.5	272.5	0.0%	271.8		
Paperboard containers	160.8	158.2	-1.6%	159.1		
Paper bags and coated and treated paper	53.3	54.7	2.6%	54.1		
Stationery and other converted paper products	58.4	59.6	2.1%	58.6		
Plastics packaging materials, film, and sheet	100.3	100.1	-0.2%	100.4		
Publishing	902.2	893.6	-1.0%	904.4	897.9	-0.7%
Newspaper, periodical, book, and directory publishers	255.6	241.1	-5.7%	255.2		
Newspaper publishers	84.8	78.1	-7.9%	84.9		
Periodical publishers	61.6	58.4	-5.2%	62.1		
Book publishers	55.3	54.7	-1.1%	54.5		
Directory, mailing list, and other publishers	53.9	49.9	-7.4%	53.7		
Graphic design services	52.0	50.9	-2.1%	51.7		
Advertising and related services	482.5	478.5	-0.8%	479.8	473.3	-1.4%
Advertising agencies	210.2	203.7	-3.1%	209.3		
Public relations agencies	64.0	61.0	-4.7%	62.9		
Media buying agencies and media representatives	35.2	35.3	0.3%	34.7		
Display advertising	30.2	29.1	-3.6%	30.2		
Direct mail advertising	31.6	30.1	-4.7%	31.6		
Advertising material distribution and other advertising services	111.3	119.3	7.2%	111.1		

We kicked off 2026 with a 2.7% decrease in overall industry employment in January, and thus we were happy that February employment was generally flat. In March, overall employment remained generally flat, being up only 0.3%, and while production employment was down 0.8%, non-production employment was up by 2.9%.

Publishing employment was up 0.5% from February to March.

Looking at other business categories, the reporting of which lags a month:

Overall employment in the signage industry was flat from January to February, with sign production employment up 0.5%, and non-production unchanged.

Converted paper products employment was up 0.2% from January to February, with paperboard container employment down 0.5% and paper bags and coated and treated paper employment up 2.8%.

Looking at some specific publishing and creative segments, from January to February, periodical publishing employment was down 2.2%, newspaper publishing employment was up 0.9%, and book publishing was down 0.9%. Graphic design employment was up 0.4%, ad agency employment was up 0.3%, and PR agency employment was up 0.7%. Direct mail advertising employment was up 0.7% from January to February.

As for March employment in general, it was not particularly encouraging. The [BLS reported](#) on April 3: Total nonfarm payroll employment increased by 178,000 in March, and the unemployment rate changed little at 4.3 percent, the U.S. Bureau of Labor Statistics reported today. Job gains occurred in health care, in construction, and in transportation and warehousing. Federal government employment continued to decline.

The U-6 rate (the so-called “real” unemployment rate which includes not just those currently unemployed but also those who are underemployed, marginally attached to the workforce, and have given up looking for work) increased from 7.9% to 8.0%.

The labor force participation rate decreased from 62.1% to 61.9% and the employment-to-population decreased from 59.3% to 59.2%. The labor force participation rate for 24–54-year-olds decreased from 83.9% to 83.8%.

The revisions this time were pretty mild:

The change in total nonfarm payroll employment for January was revised up by 34,000, from +126,000 to +160,000, and the change for February was revised down by 41,000, from -92,000 to -133,000. With these revisions, employment in January and February combined is 7,000 lower than previously reported.

This was not a bad jobs report and was well above the consensus forecast of 50,000 jobs added.

In-plant Impressions – April 15

In-plant Staffing Practices and Trends

EXECUTIVE SUMMARY

To run an in-plant, you need people — people to run presses, operate bindery equipment, process jobs, and install graphics, all while making sure people know about your services.

However, in-plants often have more work to manage than staff available to handle it. Plus, the ambition to better serve their parent organization motivates managers to upgrade their services and add new offerings, which often requires more human effort.

To determine what the staffing landscape looks like at in-plants, *In-plant Impressions* conducted a survey to find out exactly what staffing challenges are most prevalent, and how the most successful shops are managing their people.

Overall, many in-plants highlight the role financial incentives — such as compensation and benefits — play in finding and retaining top talent. While in-plant managers acknowledge the wage difference between jobs at their shops and in the private sector, they also suggest employees at in-plants may be promoted more quickly and have greater job security.

Other retention techniques managers cite are associated with building a positive work environment. Many point out that treating people with respect and being positive goes a long way in keeping people on board, as does offering opportunities for growth and recognizing employee achievements.

A similar approach is reported for hiring employees. “We have been more successful hiring for character traits than specifically experience with equipment,” one respondent notes. “The print production skill sets are easier to train and teach than the interpersonal side.”

This hiring practice seems to address some of the challenges managers report with finding skilled workers.

Another recurring hiring strategy is networking, emphasizing the significance of community among in-plants. “The better employees seem to come by word of mouth,” according to one survey participant.

Given these overarching themes, consider these high-level key findings on staffing at in-plants:

- Staffing shortages remain common, with more than a quarter (29%) of in-plants reporting they had open positions to fill.
- Full-time roles are the priority for in-plants with vacancies, signaling an emphasis on operational continuity and reducing workflow disruptions.
- Budget constraints are the biggest barrier to hiring, with 67% of short-staffed in-plants citing hiring freezes or lack of funding.
- Lack of approval to hire has long-term consequences; in-plants without approval are more likely to have at least one role open for more than a year.
- Finding skilled labor is the top hiring challenge — reported by 77% of managers — and often compounded by candidates’ higher pay expectations.
- Staffing vacancies have ripple effects, increasing employee workloads and negatively impacting turnaround times, overtime, and production quality.
- More than three-quarters of in-plants report they are confident they will be fully staffed in the next 12 months.

Wide-format Impressions – April 14

2026 International Sign Expo Delivers New Solutions, Strategies



By [Dan Marx](#)

- The International Sign Association’s International Sign Expo, held last week in Orlando, Florida, seemed to be quite successful. The energy was positive, aisles and booths were busy, and new equipment was introduced.

Equipment Launches

- Regarding the booths of wide-format equipment OEMs, there were numerous equipment launches at ISA, including those from Roland (TrueVis XG-640, Dimense DA-640, VersaSTUDIO BN2-30), Canon (Arizona 2380 GTF, Ip GP-4600S), Epson (G9070 DTF, SureColor V4000), Mimaki (UJV200-160/130 LED Printer, UJ330H0-160), and CGS-ORIS (KCXL+ UV LED Flatbed).



Among the wide-format printing devices introduced at ISA was the Epson SureColor G9070 DTF printer.

- While mid-market-focused companies like, Mimaki and Epson displayed an extensive array of machines from their portfolios, higher production-focused manufacturers, such as Durst and Agfa, brought systems aimed toward the more affordable, lower production end of their offerings. In a broad way, that makes sense, and in a way describes a difference in how the technologies are used in the sign industry versus the printing industry (though there is indeed much overlap).
- Beyond printing systems, finishing technologies were also widely represented at the event, with a wide variety of cutting, routing and laser systems on display from manufacturers including Kongsberg, Zund, Summa, Graphco, Elitron America, Kongsberg/Multicam, Graphtec, and Cutworx. These and other finishing systems speak to the need to convert prints into products, and to do so quickly, efficiently, and with reliable quality. New products in this space included Epilog's Fusion Ascent Series and Kongsberg/Multicam's MC Apex3R Evo, MC Apex1R, and KB X24, and Graphco's SD-Italy Augusta F150R Pro Hybrid.



New finishing technologies, such as Graphco's SD-Italy Augusta F150R Pro Hybrid also graced the exhibition floor.

- The number of notable wide-format equipment launches at ISA is testament to the need for a significant spring event for this print segment, and the event provides a strong platform for launches within a certain range.

Some Areas Shrinking

- While a wide variety of direct-to-film (DTF) solutions could be found on the ISA expo floor, it was interesting to note that the presence of other apparel decoration technologies, such as direct-to-garment and apparel-focused dye-sublimation were few and far between. It should be noted that DTF can be used to image a much wider range of products and is still in a development/discovery period. UV DTF is also showing impressive results, particularly for high-durability imaging for promotional products, which also seemed to be less widely represented at ISA. These developments lead to one possible conclusion: The sign industry is, by and large, doing fine and not seeking to expand into adjacent product categories, and, thus, apparel and promo exhibitors have not seen the return on investment they hoped for from the event.
- One thing noted by a handful of exhibitors and attendees was that the total footprint of the event was smaller. This may be, in part, because of fewer exhibitors along the edges of the exhibit space, often with 10x10 booths featuring commodity or exotic products, or features companies not seeking sales, but partnership with U.S. companies, were present for 2026.

Present and Emerging

- That said, the core of the sign segment appears strong, and ISA does an admirable job building community, offering educational opportunities, bringing energy, and presenting a well-run Expo.



The Eufy Make, a personal 3D-texture UV printer aimed at the maker space, was highlighted in ISA's Tech Zone.

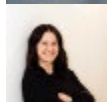
- Of particular interest this year was ISA's Tech Zone, which featured new and innovative products including solar-powered lighted sign stands and bespoke and see-through digital displays. It also, more interestingly included two A.I. software platforms, Architech and Vuely, that help sign shops manage measurements and mock-ups and manage architectural and signage codes. Another intriguing offering in the Tech Zone was Eufy Make, a machine which is marketed as the world's first personal 3D-texture UV printer. This maker-focused solution lists for \$2499 and was launched via a Kickstarter campaign.

Next Year's International Sign Expo

- The 2027 International Sign Expo is scheduled for March 30-April 1 at the Mandalay Bay Convention Center in Las Vegas, Nevada, March 30-April 1.

Printing Impressions – April 14

Why Quantum-Resistant Printing is the New Gold Standard



By [Alyssa Summers](#)

The Quantum Leap in Document Security

As someone in the print industry, the phrase "data breach" has taken on a terrifying new dimension. For decades, the commercial printing industry viewed security through the lens of physical access: badge readers, locked trays, and "pull printing" to ensure a document wasn't snatched off the exit tray. However, as of this year, the threat has migrated from the physical tray to the quantum "realm." With the official release of enterprise hardware like the HP LaserJet Enterprise 5000 and 6000 series, the industry has reached a tipping point. Quantum-Resistant Printing (QRP) is no longer a niche requirement for defense contractors, it is a standard clause in almost every high-value commercial RFP (Request for Proposal).

What is Quantum-Resistant Printing?

Quantum-Resistant Printing is the integration of Post-Quantum Cryptography (PQC) into the entire lifecycle of a print job, from the moment a user hits "Print" on their workstation to the moment the ink hits the paper.

To define it simply: It is a security framework that replaces traditional encryption methods (like RSA and Elliptic Curve Cryptography) with new mathematical algorithms that are "mathematically hard" even for a quantum computer to solve.

While classical computers might take trillions of years to crack an RSA-2048 key, a sufficiently powerful quantum computer using Shor's Algorithm could theoretically do it in hours. Quantum-resistant printing ensures that even if a quantum computer is used to intercept and analyze print data, the information remains gibberish.

Why Our 'Old Math' is Breaking When It Comes to Security

To understand why the commercial print industry is pivoting, we have to look at the math. Current encryption relies on the difficulty of factoring large prime numbers. In simple terms:

- Classical Security - Finding the two prime factors of a massive number is hard for a standard computer.
- The Quantum Threat - Quantum computers use "qubits" and superposition. They don't just guess numbers; they use quantum interference to find the answer almost instantly.

Post-Quantum Cryptography (PQC)

Now, we have moved toward Lattice-based Cryptography. Instead of factoring numbers, this tech relies on finding the shortest vector in a high-dimensional grid (lattice). This is a problem that remains exponentially difficult for both classical and quantum computers.

By following the NIST FIPS 203 and 204 standards, modern printers now use these lattice-based digital signatures to verify their firmware and encrypt the data "tunnel" between the server and the printer.

The 'Harvest Now, Decrypt Later' (HNDL) Crisis

The most pressing reason the commercial print industry should care isn't a threat that exists today, but a threat that is being built right now. This is known as "Harvest Now, Decrypt Later" (HNDL).

Cyber-adversaries are currently intercepting and storing massive amounts of encrypted data, including sensitive print streams from law firms, hospitals, and financial institutions. They cannot read this data yet. However, they are banking on the fact that in 5 to 10 years, quantum computing power will be accessible enough to decrypt these "harvested" files.

If a commercial printer handles a 20-year land deed or a 10-year clinical trial document today using 2024-era encryption, that document is effectively a "time bomb" of data exposure. Quantum-resistant printing "future-proofs" the data, ensuring it remains secure for decades.

Why the Commercial Print Industry Should Care

For a commercial print shop, "trust" is the most valuable product on the floor. This year, the industry is seeing a shift in liability and client expectations:

1. Liability and Compliance

Insurance companies have begun denying coverage for data breaches if the provider cannot prove they used "Quantum-Resilient" standards for sensitive sectors. If you are a printer for a healthcare provider, and a HIPAA-protected document is intercepted today and decrypted in 2030, the legal liability could trace back to the print provider's lack of PQC-compliant infrastructure.

2. Competitive Advantage in RFPs

Major banks and government agencies now include a "Quantum-Safe Architecture" section in their procurement documents. Print shops that upgraded to HP's PQC-enabled hardware or similar enterprise solutions are winning contracts over those still running legacy 2022-era fleets.

3. Data Sovereignty

As printing becomes more decentralized and "print-on-demand" networks grow, data often crosses international borders. Quantum-resistant protocols ensure that data sovereignty is maintained even when jobs are routed through third-party cloud servers.

Core Pillars of the Modern Quantum Print Tech Stack

The transition to quantum-safe printing isn't just a software update; it's a holistic hardware and software overhaul.

PQC in Firmware (The Brain)

Printers are essentially high-powered computers. If a hacker replaces a printer's firmware with a malicious version, they have total control. Modern printers use ASIC-level PQC implementations. This means the "handshake" that verifies the firmware is genuine is protected by lattice-based signatures that a quantum computer cannot spoof.

Quantum Random Number Generators (QRNG)

Traditional computers use "pseudo-random" numbers, which follow a predictable pattern if you have enough computing power. This year, high-end printers integrate QRNG chips. These use the inherent randomness of subatomic particles to create encryption keys that are truly, 100% unpredictable. This makes the "Pull Printing" release code virtually impossible to guess.

Secure Remote Print Transmission

For remote workers or branch offices, data travels over the open internet. Legacy VPNs are vulnerable to quantum "man-in-the-middle" attacks. The new standard uses Quantum-Resistant TLS (Transport Layer Security), creating an uncrackable tunnel from the user's device to the printer's internal storage.

Real-World Quantum-Resistant Printing Use Cases

- Legal Industry - Law firms printing discovery documents or trade secret litigation materials now require "End-to-End PQC" to maintain attorney-client privilege against future quantum decryption.
- Pharmaceuticals - During the printing of drug patent applications or clinical trial results, the data is encrypted using QRNG-generated keys to ensure the intellectual property remains secret for its 20-year lifespan.
- Government/Defense - Military-grade printers now ship with "Zero-Trust" quantum modules that wipe the hardware's memory using quantum-safe protocols after every job.

The Role of AI and Computing Power

We live in a world where AI-driven brute-force attacks are becoming common. AI can analyze patterns in encrypted traffic to find vulnerabilities in traditional RSA implementations. When you combine the pattern-recognition of AI with the raw processing power of emerging quantum processors, traditional security doesn't just "fail", it evaporates.

Big companies with sensitive data have made quantum-resistance the standard because they realize that AI is the "accelerant" for decryption. To counter an AI-driven quantum attack, you need math that doesn't rely on patterns or simple prime factors. You need the structural complexity of PQC.

Adjacent Industries Leading the Charge

The printing industry isn't alone in this transition. By looking at adjacent sectors, we can see the roadmap for the future of print:

- Financial Services - Banks were the first to adopt Quantum Key Distribution (QKD) for inter-branch transfers. Printers in these banks are now "nodes" in this quantum-secure network.
- Telecommunications - 6G networks, currently in early testing, are being built with quantum-resistant backbones. Print-as-a-Service (PaaS) providers are leveraging these 6G networks to offer "Quantum-Cloud Printing."
- Automotive - Over-the-air (OTA) updates for autonomous vehicles now use PQC to prevent "quantum hijacking." Printers use similar logic to protect their own cloud-based updates.

Legacy vs. Quantum-Resistant: A Comparison

Feature	Legacy Standard (Pre-2025)	Quantum-Resistant Standard (2026 and beyond)
Primary Math	RSA / ECC (Factoring)	Lattice-based / Hash-based (PQC)
Key Generation	Software-based Pseudo-Random	Hardware-based QRNG
Firmware Integrity	Standard Digital Signatures	ASIC-level PQC Signatures
Threat Profile	Guarding against current hackers	Guarding against "Harvest Now, Decrypt Later"
Network Security	Standard TLS/SSL	Quantum-Safe TLS

- [Click to enlarge.](#)

The New "Normal" for Commercial Print Security

As we move deeper into the future, the distinction between "regular printing" and "secure printing" is fading. In a world of ubiquitous AI and looming quantum threats, Quantum-Resistant Printing is simply "Printing."

For commercial printers, the message is clear: The hardware you buy today will likely be in service for the next 5 to 7 years. If that hardware does not have PQC built into its silicon, like the new HP LaserJet Enterprise 5000/6000 series, you are investing in obsolete technology that may become a liability before it is even fully depreciated.

Protecting the printed page is no longer just about who is standing at the machine; it's about ensuring that the data behind the page is safe from the most powerful computers ever built. The quantum era has arrived, and for the commercial print industry, the only way forward is through the lattice.

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Printing Impressions – April 7

Toshiba Expands High-Output Print Portfolio

Toshiba America Business Solutions is expanding its high-output print portfolio with the addition of Xerox PrimeLink color and monochrome light-production printers. The move bolsters Toshiba's client-first, best-in-class, multi-vendor strategy, enabling organizations to build the most optimal print environment possible.

Adding Xerox PrimeLink color and monochrome systems better allows Toshiba clients to produce further high-impact materials in-house – from marketing collateral to booklets, manuals, and oversized banners – all supported by Toshiba's trusted nationwide service and solutions expertise.

"Organizations are seeking more control of their print environments, and that starts with having more choice," states Toshiba America Business Solutions President and Chief Executive Officer Larry White. "By including these high-output systems in our portfolio, we're providing businesses the power to create further, produce faster, and elevate the quality of their printed communications — all within the flexible, multi-vendor ecosystem Toshiba is known for."

The offering builds on an already established relationship between Toshiba and Xerox, following the acquisition of Lexmark by Xerox, enabling seamless integration and enhanced customer support across a broader range of solutions.

"By incorporating Xerox light production printers alongside Toshiba's printer lineup, we're broadening the options available to their clients, and helping them address a wider range of needs with greater flexibility," says Terry Antinora, president, Global Production Print Services at Xerox.

Delivering High-Output Print for Businesses

The Xerox PrimeLink C9200 Series – featuring three models with a top print speed of 81 pages per minute – is optimum for marketing teams, creative departments, in-plant operations, and organizations producing vibrant, high-quality materials in-house.

The systems are particularly ideal for businesses requiring the following capabilities:

- High color output at 2400 × 2400 dots per inch
- Media flexibility supporting heavy stock (up to 400 grams per square meter) and banners as large as 51 inches
- High-speed, dual-head scanning of up to 270 inches per minute
- Inline finishing for professional-grade outputs
- Increased security with dozens of certifications ensuring device and data protection
- Workflow automation & color accuracy through integrated and Fiery front ends
- High-volume capability up to 500,000 pages a month

The Xerox PrimeLink B9100 Series Production Press – which includes four systems ranging in print speeds of 100 to 136 ppm – is optimum for education, government, healthcare, manufacturing, legal and any business requiring fast, dependable, large-scale monochrome output.

The systems are particularly best for organizations requiring the following attributes:

- Precision black-and-white imaging at 2400 × 2400 dpi
- Broad media handling, including extra-long sheets up to 26 inches
- High-volume finishing for booklets, binders, and advanced punching
- Robust durability supporting up to three million pages a month

The new offerings reinforce Toshiba's leadership in providing a flexible, client-centric hardware strategy backed by an elite service, support, and solutions infrastructure.

[Source: Toshiba](#)

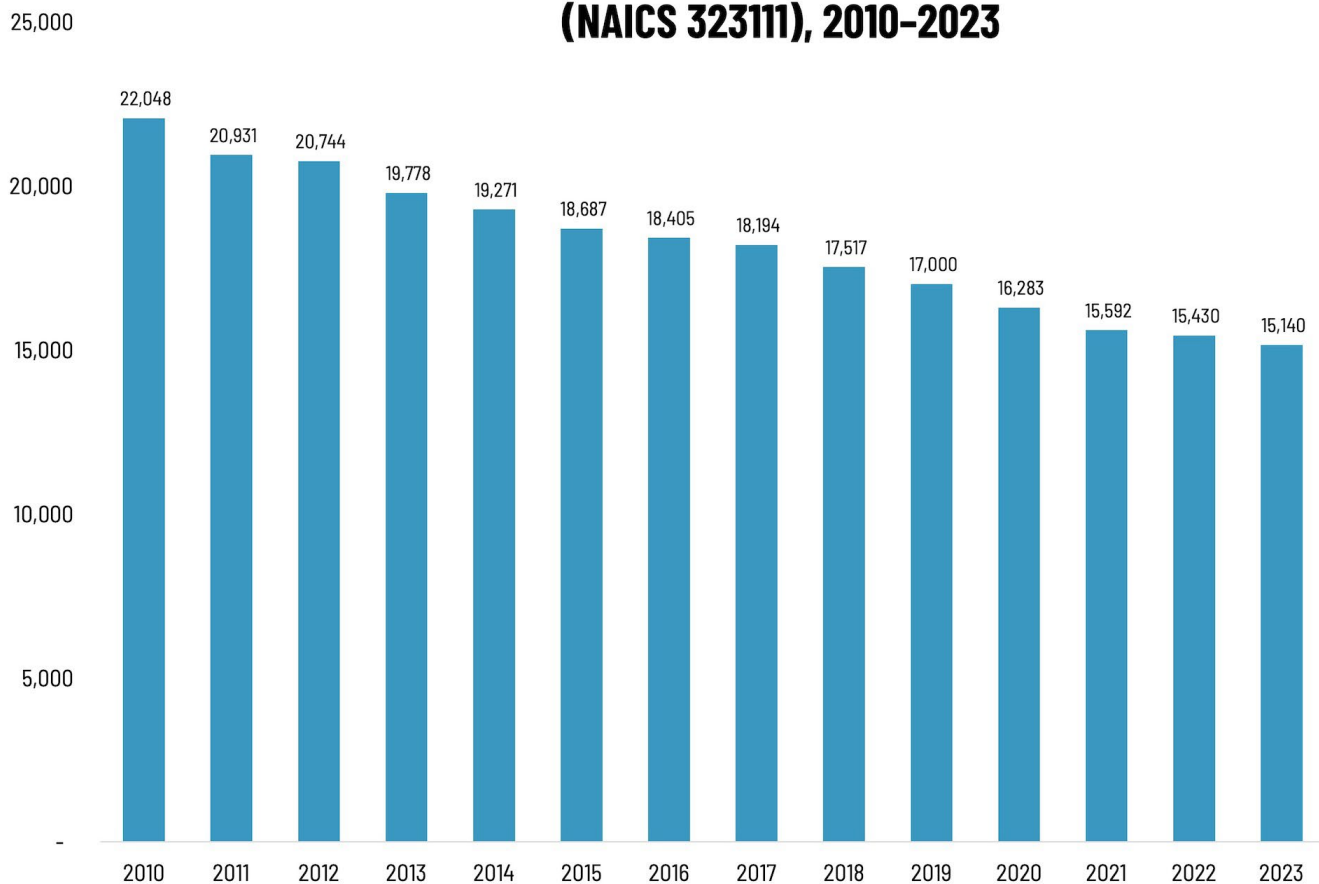
What They Think – April 10

Commercial Printing Establishments—2010–2023

According to the latest, recently released edition of County Business Patterns, in 2023 there were 15,140 establishments in NAICS 323111 (Commercial Printing except Screen and Books). This represents a decline of 31% since 2010.

Friday, April 10, 2026

**US Printing Establishments (Except Screen and Books)
 (NAICS 323111), 2010–2023**



According to the latest edition of *County Business Patterns*, as 2023 began, there were 15,140 establishments in NAICS 323111 (Commercial Printing except Screen and Books). This represents a decline of 31% since 2010.

The Bureau of the Census definition for this business classification:

This U.S. industry comprises establishments primarily engaged in commercial printing (except screen printing, books printing) without publishing (except grey goods printing). The printing processes used

in this industry include, but are not limited to, lithographic, gravure, flexographic, letterpress, engraving, and various digital printing technologies. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job-order basis. Establishments primarily engaged in traditional printing activities combined with document photocopying services (i.e., quick printers) or primarily engaged in printing graphical materials using digital printing equipment are included in this industry.

The biggest declines were in the early years of the decade (but see statistical note below), thanks to the Great Recession, with establishments dropping 5% from 2010 to 2011. Things stabilized by mid-decade, but consolidation picked up toward the end of the decade, with establishments declining 12% from 2018 to 2022. The impact of COVID wasn't as bad as we might have thought.

A statistical note: in the 2012 Economic Census, the Census Bureau had overhauled the three-digit NAICS 323 and rolled up a number of sub-categories. In 2010 and 2011 (that is, prior to 2012), the categories in NAICS 323 were:

- 323 Printing and related support activities
- 32311 Printing
- 323110 Commercial lithographic printing
- 323111 Commercial gravure printing
- 323112 Commercial flexographic printing
- 323113 Commercial screen printing
- 323114 Quick printing
- 323115 Digital printing
- 323116 Manifold business forms printing
- 323117 Books printing
- 323118 Blankbook, looseleaf binders, and devices manufacturing
- 323119 Other commercial printing
- 32312 Support activities for printing
- 323121 Tradebinding and related work
- 323122 Prepress services

Following the 2012 Economic Census, NAICS 323 was whittled down to:

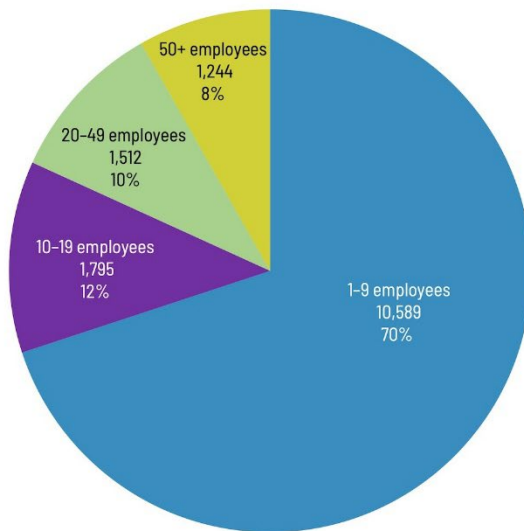
- 323 Printing and Related Support Activities
- 32311 Printing
- 323111 Commercial Printing (except Screen and Books)
- 323113 Commercial Screen Printing
- 323117 Books Printing
- 32312 Support Activities for Printing

Many of those sub-NAICS categories were combined into 323111. To arrive at the 2010 and 2011 numbers in the chart above, we combined establishments for NAICS 323110, 323111, 323112, 323114,

323115, 323116, 323118, and 323119 to arrive at establishments for new NAICS 323111. Note that screen and book printing have been left to their own NAICS categories. For now.

Small shops (1 to 9 employees) still comprise the bulk of the industry, accounting for 70% of all establishments. The largest shops account for only 8% of industry establishments with mid-size shops accounting for 22% of establishments. These percentages have not varied substantially since at least as far back as 2010.

Number of Printing Establishments (NAICS 323111), 2023



These counts are based on data from the Census Bureau’s *County Business Patterns*. Throughout this year, we will be updating these data series with the latest *CBP* figures. *County Business*

Patterns includes other data, such as number of employees, payroll, etc. These counts are broken down by commercial printing business classification (based on NAICS, the North American Industrial Classification System):

- 323113 (Commercial Screen Printing)
- 323117 (Books Printing)
- 32312 (Support Activities for Printing—aka prepress and postpress services)

These data, and the overarching year-to-year trends, like other demographic data, can be used not only for business planning and forecasting, but also sales and marketing resource allocation.

Target Report: What in the World is Schutzschirmverfahren?



By [Mark Hahn](#)



Schutzschirmverfahren (*shüts- ,shir-m fär- 'fä-rän*): a German word literally translated as “Protective Shield Proceedings,” but in practical terms, it is the German equivalent of a self-administered, court-supervised proceeding under Chapter 11 of the US Bankruptcy Code.

Exit, Consolidate, or Invest

Despite the recent spate of numerous plant closures and total plant auctions, we do not see evidence of widespread company failures in the printing industry. Rather, recent transactional activity suggests something more structural at work. The industry is not collapsing; it continues to be sorted out by market forces as the demand for printed products changes.

Three distinct pathways are emerging: excess capacity is being wrung out of the system via company and plant closures, often outside formal restructuring processes; core mature print markets are continuously consolidating through many, sometimes small, local transactions; and capital continues to flow toward the growth segments, in particular packaging and digital print technologies, albeit at a much slower pace than in previous years. Together, these dynamics are reshaping the printing and packaging industry from the inside out.

Wrung Out - Manroland Sheetfed Files Bankruptcy

One of the most highly respected manufacturers of printing equipment, [Manroland Sheetfed](#), entered into bankruptcy proceedings in Germany under that country’s Insolvency Code, which provides the option for management to retain control of the company while restructuring, rather than being replaced by a court-appointed administrator.

The Manroland press line traces its origin back to 1844 in Augsburg, Germany, and has been associated with many innovations throughout its long history. The company initially focused on producing steam engines, but within a couple of decades had expanded into manufacturing printing presses. In 1875, the company introduced the *Albatross Press*, which produced up to 700 sheets per hour, a very productive rate for a sheetfed press (“Albatross” clearly had a different, more positive connotation at the time). The company came into its own in 1911 with the introduction of its first sheetfed offset press. Another milestone was achieved in 1951 when the company introduced the 4-color sheetfed *Ultra* press at Drupa, revolutionary at the time for its “planetary cylinder” design, which enabled full-color printing in one pass through the press.

The company progressed over the following decades with a convoluted series of mergers. The 1979 merger with the MAN Group brought web press production into the company. To gain entry into the US market, the company marketed its presses under the brand name Miele-Roland, piggybacking on the reputation of Miele presses.

Manroland, with both sheetfed and web press manufacturing under its belt, churned through several ownership structures: corporate enterprise, foreign, and private equity. Following its first insolvency filing in 2012, the company emerged from that restructuring as two separate entities, Manroland Sheetfed, embracing sheetfed technology, under the umbrella of UK-based Langley Holdings. The legacy web press business was purchased by Possehl Group, a German industrial conglomerate, eventually merging it with Goss International to form Manroland Goss. (See [The Target Report: Press Onward! - March 2018](#)).

We may be seeing the end of the sheetfed branch of the Manroland family of printing presses. The CEO of Langley Holdings was quoted in the company’s review as saying, “The situation at Manroland Sheetfed is unsustainable.” The company’s restructuring expert noted that they “will have to implement drastic and far-reaching measures” and that it “is regrettable that a great many jobs will be lost.” Over the past couple of decades, much of the packaging market has shifted to Koenig & Bauer (KBA) for its very-large-format offset presses. Komori has made significant inroads into the commercial market for high-speed automated offset presses. Heidelberg has held its ground in both the commercial and packaging markets. Given these market trends, we will not be surprised if Manroland Sheetfed exits the manufacture of printing presses and is consigned to simply servicing its legacy of installed machines.

Consolidation as the Default Path

The most visible activity in March was the steady cadence of small and mid-sized acquisitions across commercial printing. These were not transformative platform deals or private equity-backed roll-ups. Instead, they were overwhelmingly local, strategic tuck-ins, transactions driven by geography, customer overlap, and operational efficiency.

BP Print Group’s acquisition of [PrintFast Marketing Solutions](#) in New Jersey, Andrick & Associates’ tuck-in of Target Graphics in Florida, and PackEdge’s purchase of Keno Graphics in Connecticut, all follow a similar pattern: buyers and sellers operating in the same regional markets, combining to improve utilization and retain customer relationships. At the lower end of the market, consolidation via tuck-in transactions provides owners with a graceful exit path as the commercial printing industry volume slowly declines.

Franchise and network operators continue to play an important role in this consolidation dynamic. The Minuteman Press in Kalamazoo, Michigan, acquired local company JB Printing. In Iowa, the North Liberty franchise purchased Goodfellow Printing. The Allegra Marketing Print Mail franchise in Baltimore expanded its footprint by acquiring the Image360 franchise location in downtown Baltimore. These transactions demonstrate how franchise organizations now act as aggregation vehicles for many smaller, independent printers. The franchisors' model: local ownership combined with broader branding and operational support, positions the franchise systems to absorb sub-scale competitors and attract entrepreneurial entrants into the printing industry.

Notably absent from the month's activity were large-scale commercial print platform acquisitions. There were no multi-state roll-ups and no significant private equity entries into traditional print. The lack of headline transactions suggests that growth expectations are not driving consolidation, but rather that consolidation is occurring by necessity. For many operators, acquisition is less about expansion and more about survival: adding volume, improving equipment utilization, and maintaining relevance in increasingly competitive local markets while at the same time removing a competitor from the playing field. In the current market, consolidation is happening at the edges, not on a large scale, at least not yet.

Investment Flows Toward Packaging and Technology

In contrast to the fragmented and largely local nature of commercial print M&A, capital deployment in packaging and enabling technologies continues to occur at scale and with strategic intent. Altamont Capital Partners' investment in [Key Container Corporation](#) reflects ongoing private equity interest in corrugated packaging, despite reports that demand for corrugated boxes has declined following a systemic reset after the post-Covid period, as well as online retailers shifting to paper bags and envelopes as more cost-effective carriers.

Similarly, CCL Industries' \$113 million (USD) acquisition of [Sleeve International](#) underscores the strategic, long-term value of packaging companies, in this case, shrink-sleeve production. Consistent with the deal discipline that CCL has shown in the past, the multiple paid was 6.4x adjusted EBITDA. (See [The Target Report: CCL Industries Breaks the Rules – January 2022](#)). This multiple is not only a sign of CCL's approach but moreover is indicative of the cooling off of the red-hot market for packaging companies, even allowing that shrink sleeves were not as hot as labels and flexible packaging. Even more striking among the deal metrics revealed was that net tangible assets are expected to represent 90% of the purchase price, leaving just 10% to be allocated to goodwill.

An Industry Being Sorted

Taken together, the March data does not portray an industry in crisis, nor is it indicative of a booming business for print and packaging companies. It describes an industry being sorted. Three pathways are becoming increasingly distinct. As is the case with many of the closures noted in our deal log, and as may be the case with Manroland Sheetfed, when the headwinds are too strong, some fold up their tent and close up shop. Consolidation is reshaping core print markets as local operators combine to remain viable, with the survivors absorbing work from exiting companies. And finally, investment is still flowing into packaging, labels, and digital print technologies, the industry segments aligned with growth, and attracting capital.

2026 March - Mergers and Acquisitions in the Printing, Packaging, Paper & Related Industries										
Deal Party #1 (Surviving Entity)	Pre-Deal Revenue (US\$M)	Party #1 Address	Deal Party #2	Pre-Deal Revenue (US\$M)	Party #2 Address	Date Deal Public	Deal Value (US\$M)	Deal Structure (Investment)	Notes	Press Links
BP Print Group	No Data	Lakewood, NJ	Printfast Marketing Solutions	No Data	Middlesex, NJ	3/31/26	No Data	Acquisition (Graphic Arts Advisors)	Commercial print & marketing	Link
Patton Media Group	No Data	Peachuck, KY	The Franklin Press (48 Titles) (Prop. Common by Newspapers)	No Data	Athens, GA	3/31/26	No Data	Acquisition (3rds, Van Loan)	Community newspapers	Link
Alagra Marketing Print Mail	No Data	Baltimore, MD	Image360 Baltimore Downtown	No Data	Baltimore, MD	3/31/26	No Data	Acquisition	Wide-format & signage	Link
Andrick & Associates	No Data	Sarasota, FL	Target Graphics	No Data	Sarasota, FL	3/30/26	No Data	Acquisition	Commercial printing	Link
PackEdge	No Data	Hamden, CT	Xero Graphics	No Data	Shelton, CT	3/26/26	No Data	Acquisition	Commercial printing	Link
Milstein Press Kalamazoo	No Data	Kalamazoo, MI	RR Printing	No Data	Kalamazoo, MI	3/25/26	No Data	Acquisition	Printing & copying	Link
Graphco Mgmt Team	No Data	Cleveland, OH	Graphco	No Data	Cleveland, OH	3/24/26	No Data	Acquisition	Equipment distributor	Link
Michigan Independent Media Group	No Data	Grand Rapids, MI	Tri-City Times	No Data	Inkay, MI	3/23/26	No Data	Acquisition	Community newspaper	Link
Continuum (Div. CR Group)	No Data	Brainard, MN	Toldon	No Data	Richmond, BC	3/23/26	No Data	Acquisition	Specialty printed products	Link
CCI Industries	\$7,660	Toronto, ON	Sleeve International	\$198.7	Paris, France	3/13/26	\$112.5	Acquisition	Shrink sleeve labels	Link
Brand Boost Prints	No Data	Spokane Valley, WA	Lithograph Reproductions	No Data	Spokane Valley, WA	3/11/26	No Data	Acquisition	Commercial printing	Link
Global Printing and Packaging	No Data	Marlborough, MA	Rocketbook	No Data	Lee, MA	3/10/26	No Data	Acquisition	Notebooks	Link
AlphaGraphics North Liberty	No Data	North Liberty, IA	Goodfellow Printing	No Data	Iowa City, IA	3/9/26	No Data	Acquisition	Printing & copying	Link
Altamont Capital Partners	No Data	Palo Alto, CA	Key Container	No Data	Pawtucket, RI	3/9/26	No Data	Acquisition	Corrugated boxes & displays	Link
Pillman Partners & Reynolds Partners	No Data	Greenwich, CT Detroit, MI	Printware	No Data	Eagan, MN	3/3/26	No Data	Acquisition	Inkjet presses	Link

2026 March - Bankruptcy Filings in the Printing, Packaging, Paper & Related Industries										
Filing Party	Date Case Filed	Pre- Petition Revenue (US\$M)	Case #	Filing Party Address	Circuit	Region & City	Judge	Attorney for Debtor	Notes	
Chapter 11 Filings:										
More Than A Printer Inc.	3/11/26	No Data	26-30664	Louisville, KY		Western KY Louisville	Jean A. Lloyd	Michael W. McClain	Commercial printing	
Chapter 7 Filings:										
No Chapter 7 Filings Found this Month										
Germany Insolvency Proceeding:										
Marsland - Sheetfed Division (Sub Langley Holdings)	3/3/26	\$300.0	N/A	Offenbach am Main, Germany	N/A	N/A	N/A	N/A	Printing press manufacturing	

2026 March - Non-Bankruptcy Closures in the Printing, Packaging, Paper & Related Industries										
Closed Company / Facility	Date of Closure	Pre- Closure Revenue (US\$M)	Closing Address	Related Party	Related Party Address	Date Closure Public	Notes	Press Links		
Ace Lithographers of Morris County (dba Ace Twp)	4/30/26	No Data	Berkeley Heights, NJ	None	N/A	Mar-26	Commercial printing (Merger with Associates International)	Link		
BR Printers - Book printing plant	6/26/26	No Data	Cincinnati, OH	BR Printers	San Jose, CA	3/27/26	Book printing & manufacturing	Link		
King Printing	3/5/26	No Data	New Tazewell, TN	None	N/A	3/27/26	Commercial printing	Link		
QC Direct Mail	2/28/26	No Data	Marietta, GA	None	N/A	3/5/26	Mailing services & digital printing	Email Notice		
Lifetouch - Printing facility (Div. Shutterfly)	10/30/26	No Data	Galion, OH	Lifetouch	Redwood City, CA	3/5/26	Photobooks and specialty products	Link		
Star Litho	4/30/26	No Data	Weymouth, MA	None	N/A	3/5/26	Commercial printing	Link		

[View The Target Report online, complete with deal logs and source links for March 2026](#)
 For more information on Graphic Arts Advisors, visit graphicartsadvisors.com

Packaging Impressions – April 8

Why the M&A Stage Seems Set for an Uptick in Tuck-ins



By [James A. Russell](#)

The following article was originally published by [Printing Impressions](#). To read more of their content, subscribe to their newsletter, [Today on PIWorld](#).

We've often written in these columns about the advantages that tuck-ins offer to owners whose businesses are best suited for this type of acquisition. A tuck-in is usually the right move when growth has plateaued, the owners have no next-generation successors, or the local market is too limited to generate new clientele. Size matters as well, with small firms more likely to be acquired as tuck-ins than larger ones.

General business conditions also drive the market for tuck-ins, and if the results of 2025 are predictive of what's to come, we can expect to see more tuck-ins happening this year and in 2027.

In PRINTING United Alliance's "State of the Industry Report 2025," it's revealed that sales for survey respondents rose by an average of only 0.7% compared with sales one year earlier. Sales were flat or

decreasing for 62.8% of the survey group and up for just 32.7%. At the same time, tariff- and inflation-driven operating cost increases put pressure on margins that respondents could not fully compensate for by adjusting pricing to their customers.

Tough trends like these affect everyone, but they tend to fall hardest on companies that have not sufficiently reinvented themselves in ways that make their customers “stickier” to them. Firms in these circumstances will be especially ripe for tuck-ins by buyers who appreciate the value that is still inherent in their business.

Hub-and-Spoke Model

One such buyer is Bloomington Offset Process Inc. (BOPI), a third-generation Illinois-based print and packaging provider founded in 1947. In 2018, BOPI broadened its footprint by acquiring JK Creative Printers of Quincy, Illinois, in a tuck-in structured on a hub-and-spoke model. This involved leaving the seller’s sales force and digital print department in place in their original location and bringing the offset and direct mail volumes to BOPI’s headquarters in Bloomington, where those jobs could be produced more efficiently.

The tuck-in worked well for both parties. BOPI extended its geographic reach, and revenues from the seller’s operations went up. The growth BOPI experienced not only benefited BOPI. The sellers also benefited from a larger earnout thanks to the increased sales driven by BOPI’s more diversified product and service offering.

Last year, with the owner of one of our clients nearing retirement, and family members not interested in continuing the business legacy, we approached BOPI and other buyers about another opportunity with similar characteristics. Multiple proposals were received and reviewed, but it soon became clear that the one from BOPI offered the best cultural fit and the most reasonable financial terms. BOPI closed the transaction late in 2025, noting that operations at the seller’s location would continue much as they had before.

In this hub-and-spoke tuck-in, BOPI will shift some of the seller’s volume to its main plant and leave other work where it is. BOPI also acquired specified equipment and inventory, rented the seller’s building, and absorbed most of its employees.

Variation on a Theme

This deal could be called a hybrid or a quasi tuck-in given that the buyer acquired more than just the seller’s book of active accounts and kept a portion of the original operation in place. But no matter how a tuck-in is structured, its benefits flow in both directions.

The buyer gets to add a significant chunk of new business that might have been much more difficult to achieve through organic growth. The seller gets to monetize its most valuable asset: its account list. In a deal like this one, the seller also protects its employees’ jobs and carries on its legacy in its home

territory — a key consideration for firms with long, multigenerational histories or highly regarded reputations in their small communities.

New Direction Partners helped to close three other similarly structured tuck-ins in the fourth quarter of 2025. One of them illustrates especially well why this form of acquisition can be the best answer for owners of firms in the late stages of their business life cycles.

Still Some Value

In this example, our client was the owner of a label manufacturer that had a significant concentration of its revenue in one account. When that customer's orders declined, so did the profitability of the company. But because its remaining business was attractive, we were still able to find multiple prospective buyers. The tuck-in by the chosen buyer let the seller pay off his debt, net some proceeds going forward, and find a new tenant for the building out of which the label company had been operating.

It's important for owners to remember that whether their companies are only modestly profitable, operating at breakeven, or even losing money, their book of business still has significant value in the marketplace. We expect to see that principle hard at work for the rest of this year and into the next one as more owners learn to appreciate the practical wisdom of becoming tuck-in sellers.

Wide-format Impressions – April 6

Digital Printing Technology and Trends Shine at EFI Ignite Event



By [Cory Francer](#)

Digital printing solutions spanning wide-format graphics, packaging, and textile applications were on display at EFI's Ignite event, held March 11 at the company's headquarters in Londonderry, New Hampshire. More than 40 companies were represented, including some that made the trip from international locations, along with multiple vendor partners spanning media, software, and cutting solutions.

In addition to a guided tour of EFI's Global Customer Experience Center, attendees sat in on sessions spanning the latest print industry trends, digital embellishments and advanced applications, and an update on Fiery's Display Graphics Software Suite. Throughout the event, attendees also had open

time to speak with EFI experts in the Customer Experience Center for more in-depth insights into the equipment on display.

The day's first session featured Ken Hanulec, EFI's VP of worldwide marketing and business development, and provided perspectives on the latest trends driving innovation across the packaging, sign and display, and textile application segments. Cory Francer, an analyst with [Alliance Insights](#), the research division of [PRINTING United Alliance](#), joined Hanulec for the session, sharing examples and data points in support of each trend.

In the packaging segment, Hanulec discussed how digital printing is empowering printers to meet the needs of an evolving industry. For example, mass customization, which is being driven by digital printing's fast changeover advantages, is presenting increased opportunities for short runs, personalization, and versioning of packaging. Hanulec and Francer also discussed the critical importance of speed-to-market, waste reduction in packaging, and opportunities to enhance the "unboxing experience" that is so critical to e-commerce.

EFI's packaging portfolio centers on the Nozomi single-pass inkjet platform for corrugated packaging and displays. In addition to the Nozomi 14000 single-pass printer, EFI has also partnered with Packsize to launch the Packsize EFI X5 Nozomi. This integrated system combines the Nozomi inkjet platform with the Packsize X5 On Demand Packaging System, resulting in efficient digital printing of corrugated packaging in-line with automated rightsized box making.

For the sign and display segment, trends also reflected a push toward personalization, sustainability, and an enhanced user experience. Beyond digital printing's ability to personalize sign and display graphics, Hanulec shared how these printed applications can connect to virtual experiences via QR codes, near field communication (NFC) capabilities, and even touch-based interactivity. Similarly, immersive and interactive experiential graphics are increasing in popularity as wide-format applications are being utilized in events, retail, restaurants, and beyond to elevate the consumer's experience. On the sustainability side, Hanulec and Francer discussed the advantages of green materials, reusability of textile displays, and how lightweight soft signage is advantageous in emissions reduction. The labor landscape in wide-format print production was another key trend mentioned, with EFI's automation solutions, ease-of-use, and hybrid workflows helping bridge the skills gap left by retiring press operators.

In the display graphics segment, EFI offers flatbed, roll-to-roll, and hybrid platforms spanning a variety of width and substrate capabilities. The EFI VUTEk M3h is the company's newest hybrid offering and attendees were able to see it in action in the Customer Experience Center. The M3h features a print width of 126", up to 2,400 dpi, and can reach a maximum productivity rate of 3,131 sq. ft. or 77 boards per hour.

Trends in digital printing for textile applications included the need for nearshoring, which has become particularly important as global supply chain uncertainties persist. Similarly, print-on-demand

workflows are increasingly common as print customers seek to reduce excess production and maintain more flexibility in inventory. Consumer trends were highlighted, including value-oriented shopping as consumers become more cost-conscious. Growth potential in sportswear was also discussed, as it presents opportunities for continued textile printing innovation and partnerships.

EFI's textile portfolio includes several digital print options from its Reggiani line, spanning entry-level to high productivity platforms.

Following the opening session, attendees toured the Global Customer Experience Center for a close-up look at multiple EFI sign and display printers in action, along with packaging and textile applications, and partner products. Hybrid printers from EFI included the Pro 16h+ LED printer, VUTEK M3h, VUTEK Q3h XP high speed printer, and Pro 30h+ with Transform-TF ink for thermoforming applications. The VUTEK X5r roll-to-roll printer was also on display.

Attendees also learned about the EFI Pro 30f+ flatbed printer, which is ideal for yard signs, rigid display graphics, and other specialty applications. Those interested in textiles and soft signage had the opportunity to learn about the EFI VUTEK FabriVU line, which includes the VUTEK FabriVU 340i+ dye-sublimation printer with inline fixation.

Following open time in the Global Customer Experience Center, Stacy Keenan, a graphic applications specialist for EFI, presented a deep dive session into how EFI's technology can provide eye-catching print embellishments and advanced applications that stand out. The various techniques and applications included multilayer printing, spot and shape white printing, clear ink printing, various techniques for backlit applications, texture printing, wallcoverings, window graphics, dye sublimation and beyond.

"Part of my strength is merging the creative side and understanding how the printer works so you can maximize what you're doing creatively," Keenan said. "From a creative standpoint, understanding the appearance of inks is key to understanding what you can do to leverage them."

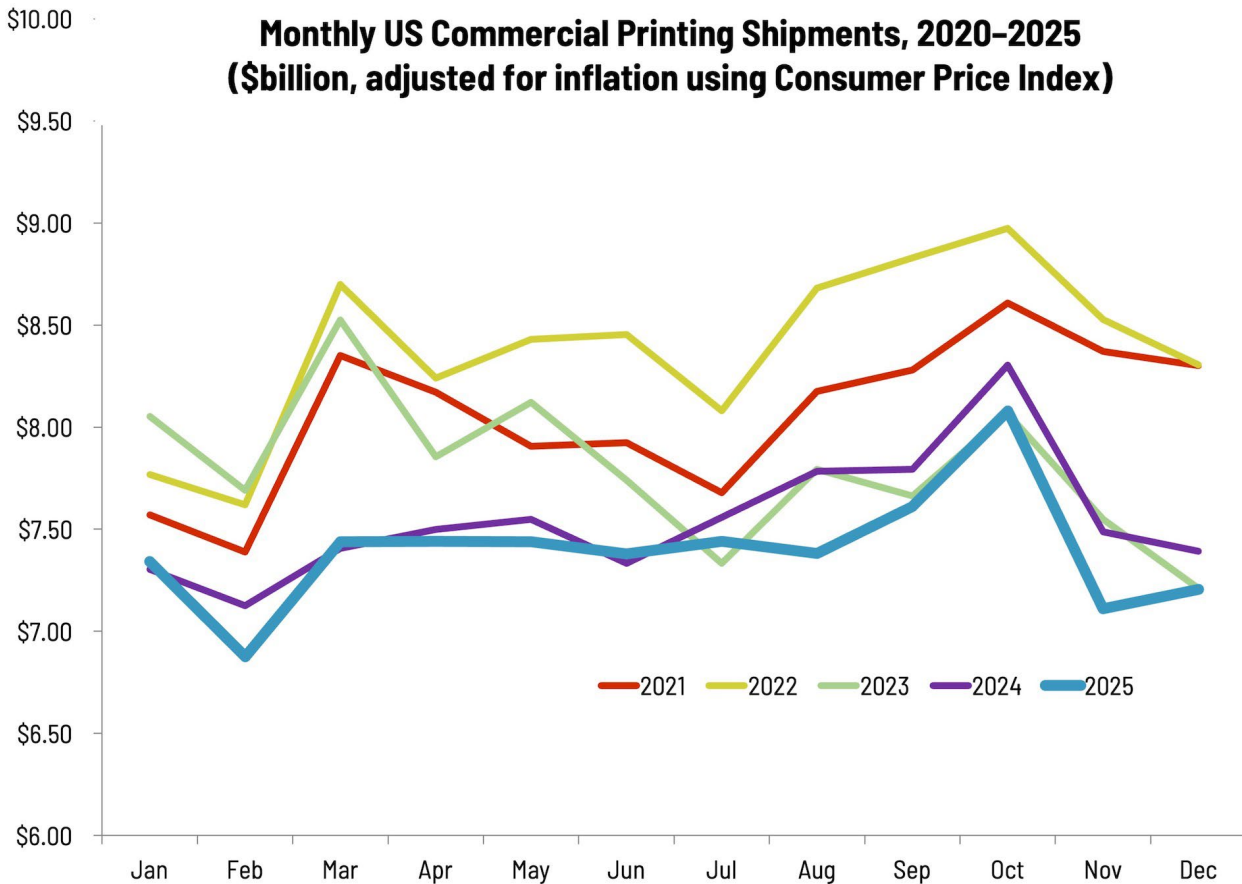
The final session of the day featured AnnMarie Berg, senior partner alliance manager for Fiery, and James Perrine, technical sales architect for Fiery, providing an update on the Fiery Display Graphics Suite. Among the solutions highlighted were the Fiery Prep-It intelligent nesting solution, JobFlow automated prepress software, the InkWise ink inventory management solution, automated variable data print software FreeForm Create, and ColorGuard, a cloud-based color management system. At the end of the sessions, Hanulec shared the importance of the Ignite event in bringing so many printing companies together in a collaborative environment to see the latest industry innovations. "This was a great Ignite event, welcoming customers, prospects, and partners from across the Americas to our Customer Experience Center in Londonderry, New Hampshire," Hanulec said. "There were great conversations, great collaboration, and great innovation happening together. Customers saw new technology, printers, applications, and software to drive efficiency into their operations."

What They Think – April 3

December Printing Shipments Rallied to End the Year

December 2025 shipments came in at \$7.21 billion, a slight rebound from November’s abysmal \$7.11 billion.

Friday, April 03, 2026



And that’s the year! After the rake across the entrails that was November 2025, printing shipments rallied in December to climb back to \$7.21 billion, putting it equal to December 2023. As we have been saying, most of 2025 certainly had its challenges macroeconomically: the tariffopalooza did not help matters (although that had kind of stabilized in the late fall, although the next few months will see the uncertainty increase again), and the employment situation had been (and continues to be) a little concerning, but seems OK. Most of 2025 was not too far off 2024, at least up to the fall, and even November’s precipitous drop parallels November 2024’s drop.

Total shipments for 2025 came in at \$88.75 billion, below 2024’s \$90.53 billion—and indeed less than those for any other year—and, yes, even the COVID year.