



AI in Print: **Moving Beyond the Hype**

How public and sovereign AI are reshaping productivity, operational performance, and competitive advantage.



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INTRODUCTION

For most print executives, the question about artificial intelligence is no longer whether it matters. It is where that intelligence resides — inside public AI platforms such as ChatGPT or within the company's own workflow, production, and business systems.

Ask many printing company leaders what AI means, and the answer is ChatGPT. That association is not wrong, but it is only half the picture. ChatGPT and the public chatbots like it are one form of AI in print: tools that draft content, summarize information, and handle routine tasks. The other form is intelligence built into the production environment itself, embedded in workflow software, press controls, and service diagnostics, running on the company's own operational data. It is the AI most print executives are still trying to understand. The confusion, and much of the missed opportunity, lies in the gap between those two forms of AI. While public chatbots can improve individual productivity, the greater competitive advantage is likely to come from AI embedded in workflow, production, and business systems.

This paper draws on a single 2025 Alliance Insights research study, [AI Adoption in the Printing Industry: From Curiosity to Competitive Advantage](#), which combined a survey of more than 300 U.S. print providers with in-depth executive interviews across the commercial, in-plant, sign, and apparel printing segments. The research found that 85% of print providers said AI is critical to staying competitive. What that figure does not settle is the harder question executives are actually asking: which uses of AI are worth the investment, and where the hype outruns the return.

The answer lies in understanding two distinct lanes of AI adoption.

The first lane is public AI, tools such as ChatGPT, Microsoft Copilot, and Google Gemini that run on external platforms. Print organizations use them for content creation, information processing, and automating routine tasks. They are fast to adopt, relatively inexpensive, and account for most of the AI activity taking place in the industry today.

The second lane is private, or “sovereign,” AI embedded in intelligent workflow and automation systems. These systems operate inside a company's own production environment, using its operational data to improve workflow, equipment performance, and service. Sovereign here means simply that the company controls the intelligence. It is trained on the company's operations and stays within them, rather than being handed to a platform someone else owns.

The two lanes do different work, carry different risks, and call for different decisions. Treating them as the same thing, or focusing on the visible, easy-to-adopt lane while neglecting the one that drives operational performance, is one of the most common ways print companies invest in AI without realizing meaningful competitive advantage. This paper separates the two and shows where the real business value sits in each.

85%

**print providers say AI
is critical to staying
competitive.**

Source: Alliance Insights, AI Adoption in the
Printing Industry, 2025

ADOPTION IS REAL AND BROAD. STRATEGY IS RARE

The executive interviews conducted as part of the study provide additional context for the survey findings. To encourage candid discussion of business challenges, technology investments, and competitive concerns, interview participants were assured confidentiality and are identified throughout this report only by print segment and revenue tier.

What the study makes clear is that AI adoption is already well underway across the printing industry. The question is no longer whether companies are experimenting with AI, but whether they are approaching it strategically. More than two-thirds of print provider survey respondents already use AI in some form, and the companies using it report having done so for about a year and a half on average. Adoption is real, measurable, and growing.

But in most organizations, adoption remains largely informal. Only 7% of surveyed firms have a formal AI roadmap. Most adoption begins with a curious manager or owner experimenting with a tool and spreading the practice outward, rather than from any deliberate plan. The result is an industry that is busy with AI but rarely strategic about it, which is precisely the condition in which hype thrives: a great deal of activity, very little direction.

That gap between AI experimentation and strategic implementation is not primarily driven by cost. Only 11% of respondents cite cost as a top barrier. What increasingly separates the companies pulling ahead is planning. Among the firms the study classifies as AI leaders, 46% report a clear roadmap, compared with just 9% of laggards, and 91% of leaders assign accountability for AI to someone in the organization; most of the time, it's IT. The leaders treat AI as a business initiative with owners and goals; the laggards treat it as an experiment.

The executives interviewed for the study put the stakes plainly. "If you're not doing it, you're either ready to retire or should move on," one commercial printer said. The sharper reading of his point is not that every shop must move quickly, but that competitive advantage is already shifting toward the companies that treat AI as a strategic business initiative rather than a novelty.

The divide that matters, then, is not between the firms using AI and the firms that are not. It is between the firms using it deliberately and the firms drifting into it. Most of that drift lands in the public-AI lane, where tools such as ChatGPT, Microsoft Copilot, and Google Gemini are used to improve individual productivity. The larger opportunity lies in embedding AI into workflow, production, and business systems, but that remains the exception rather than the rule.



**print providers with a
formal AI roadmap.**

Source: Alliance Insights, AI Adoption in the
Printing Industry, 2025

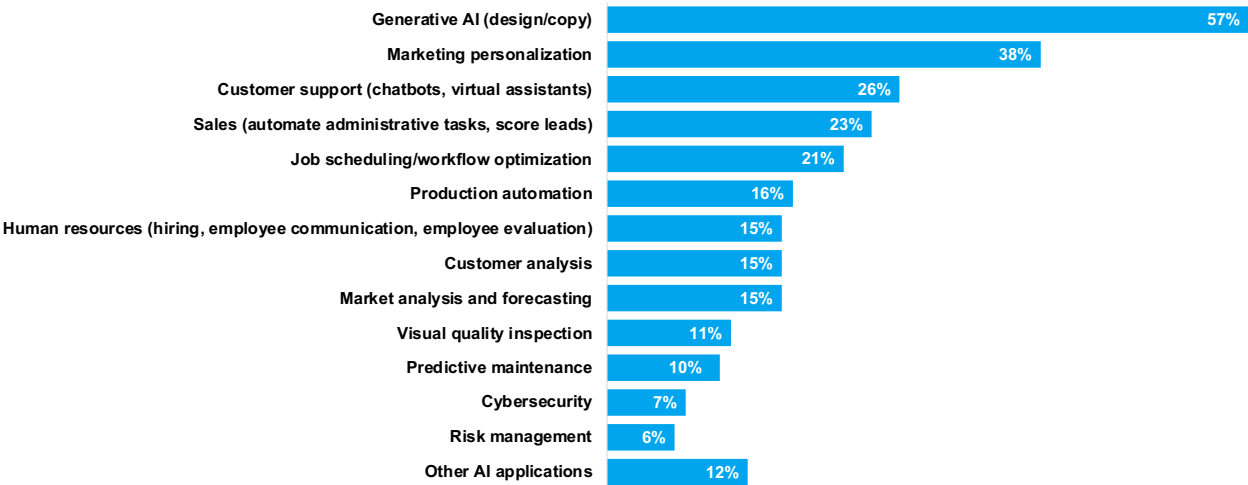
THE FIRST LANE: PUBLIC AI AND THE QUICK WIN

Public AI tools are where almost every print organization starts, for good reason. They are inexpensive, require no integration, and deliver visible results in days. The research finds that AI adoption is concentrated in the applications that are easiest to implement and quickest to deliver value (**Figure 1**). Content creation is the most common entry point. Some 57% of providers use generative AI for design and copy, and 38% apply it to marketing personalization. Executives interviewed for the Alliance Insights study consistently described AI-assisted content as their first real win: drafting blogs and product descriptions, generating design variations, and producing campaign ideas in a fraction of the time.

Information processing is another common application. Providers interviewed for the study use these tools to compress research and analysis that once took hours. A commercial printer with \$17 million in annual revenue, interviewed for the study, generated a qualified prospect list with names and contact details in about five minutes, and used the same tools to find state-specific AI training grant programs in minutes. Others apply AI to summarize contracts, compare document versions, and digest datasets. Routine-task automation is another: drafting customer emails and project updates, handling repetitive administrative steps, and clearing the small work that clogs a day.

Figure 1: Where AI Shows Up First in Print

Q. Which of the following AI applications are currently used in your organization? Select all that apply



n=201 Print Providers
Source: AI Adoption in the Printing Industry: From Curiosity to Competitive Advantage, Alliance Insights 2025



The creative and customer-facing applications clustered at the top of Figure 1 represent the first lane of AI adoption. The operational applications appearing lower in the figure belong to the second lane, where adoption remains far less common.

Executives interviewed for the study were candid about the limits. A small commercial printer with \$1 million to \$3 million in annual revenue described the discipline behind AI-drafted communications: AI drafts customer emails, project updates, and marketing content, but humans review them carefully before they go out. “It’s important customers know it’s still us,” he said. The output is fast and genuinely useful, but it is unverified by default, and its value is ultimately constrained by the fact that it functions as an assistant rather than an operator.

The benefits of public AI are significant, but they come with two important limitations. First, these tools run on external platforms that the company does not control. The same convenience that makes them useful can also create concerns about data security, intellectual property, and proprietary business information. And by design they sit at the edges of the business, on content and communication, not at its core. They do not touch the estimating logic, scheduling decisions, and equipment data that actually differentiate a print operation. The greatest long-term value comes from the lane the company owns: AI embedded in its workflows, operational processes, and production data.

RENTED VS. OWNED INTELLIGENCE

Public AI and sovereign AI create different kinds of value, and a print provider must manage both deliberately. The first lane buys speed. Public AI tools draw on models trained outside the company, generate drafts, summaries, and recommendations in seconds, and require little integration with existing systems. The second lane builds control. Sovereign AI runs within the company’s own environment, learns from its operational data, and keeps the resulting intelligence and intellectual property in-house.

The first lane is rented; the second is owned.

Public AI delivers fast wins at the edges of the business. Sovereign AI builds long-term advantage at its core. The strongest AI strategies use both deliberately and never confuse one for the other.

THE SECOND LANE: SOVEREIGN AI AND OPERATIONAL ADVANTAGE

While public AI improves individual productivity, the second lane improves the operation itself. Here, AI is embedded in workflows, equipment, and service processes, using the company’s own data to make better decisions, automate complex tasks, and improve performance. Because the intelligence is built on information the company owns and controls, the value compounds over time rather than remaining dependent on an external platform.

The case for sovereign AI begins with a simple observation: print companies already possess a vast store of proprietary operational knowledge. Amy Servi-Bonner, Vice President, Printing AI, argues that print and packaging firms possess decades of hard-won intelligence, including estimating logic refined through experience, production tradeoffs learned the hard way, scheduling decisions shaped by real constraints, and customer nuances no generic model can infer. In her view, this is not merely data. It is intellectual property.

Run this operational knowledge through public AI tools which the company does not control, and the intelligence created may not remain inside the business. Companies are not simply adopting AI; they may also be exposing valuable insights about their workflows, customers, and operations to external platforms. Servi-Bonner frames the issue with a simple test: “If AI disappeared tomorrow, what intelligence would still be ours?” The companies that can answer that question clearly are the ones building in the second lane rather than relying entirely on the first.

Sovereign AI and intelligent automation are already producing measurable results in three areas: workflow, equipment performance, and customer experience.

Workflow Optimization

The challenge is no longer whether AI can perform complex operational tasks. It is whether AI can be connected effectively to the systems where the work already happens. Among surveyed providers, 44% identify integrating AI with existing systems as a top challenge.

Organizations that solve this integration problem are beginning to see significant gains. A commercial printer with \$5 million to \$10 million in annual revenue described linking customer portals, prepress, and management systems into a single automated flow so that “the next time somebody touches something is when it comes out the press.” Another commercial printer reduced the time required to produce a complex distribution estimate from four hours to two minutes while remaining within 5% of the manual calculation. Tasks that once consumed a half-day can now be completed almost instantly.

“If AI disappeared tomorrow, what intelligence would still be ours?”

— Amy Servi-Bonner
Vice President, Printing AI

Equipment Performance

AI is increasingly moving onto the pressroom floor. A commercial printer with \$5 million to \$10 million in annual revenue uses AI for ink optimization and quality control directly on press. Another provider with \$20 million to \$40 million in annual revenue is piloting predictive maintenance systems designed to identify potential equipment failures before they result in costly downtime.

Customer Experience and Service

AI is also improving customer service and account management. A sign and graphics provider with \$150 million to \$200 million in annual revenue uses AI to analyze tens of thousands of customer interactions each week, identifying both distress points and standout service moments so managers can intervene, coach employees, and improve customer outcomes.

39%

Print providers reporting increased production efficiency, the most-cited benefit of AI.

Source: Alliance Insights, AI Adoption in the Printing Industry, 2025

These applications help explain one of the Alliance Insights study’s most important findings: production efficiency is the most frequently reported benefit of AI, cited by 39% of providers. Quality and consistency follow at 33%. Unlike the gains delivered by public AI tools, these improvements are embedded directly into operations and become more valuable as the underlying data improves.

Whether these systems are labeled artificial intelligence or intelligent automation matters less than what they accomplish. They improve productivity, quality, and service while building on data and knowledge the company controls. That distinction is becoming increasingly important as customers ask where their information is stored, how it is used, and who ultimately owns the intelligence created from it. In the second lane, the answer remains the company itself.

Public AI helps people do their jobs faster. Sovereign AI helps the business itself become smarter.

WHEN DATA CONTROL BECOMES A TRUST REQUIREMENT

Sovereign AI delivers another benefit that public AI cannot easily match: trust. As AI adoption matures, the question is no longer only how much efficiency AI can create, but how much customer trust a company can preserve. Print providers are custodians of vast amounts of customer information, from marketing databases and financial records to proprietary product specifications and confidential business documents. The moment that information moves into systems which the provider does not control, questions about ownership, security, and accountability follow.

The risk is rarely the technology itself. It is what people do with it. As Christian Quinn, managing principal at Fulcrum Innovation, observed during a 2025 Printing Impressions and In-plant Impressions webinar titled [“AI Changes the Rules: Why Cybersecurity Is Now a Sales Requirement for Print Providers,”](#) sponsored by Canon U.S.A., the exposure is “what employees with good intentions put into these things, especially customer documents.” A well-meaning staffer pasting a customer file into a public tool may be moving personally identifiable information, bank routing details, or trade secrets onto a platform the company will never get them back from.

The Alliance Insights AI study reflects the concern: privacy, security, and compliance rank among the top barriers to adoption for 22% of providers, and 76% say transparency with clients about AI use matters.

Enterprise print buyers have already reached their own conclusions. Increasingly, they evaluate data governance and AI practices before discussing price, equipment, or production capabilities. Questions about where data resides, who can access it, how long it is retained, and who is accountable for protecting it are becoming standard parts of the sales process. Panelists on the webinar described a significant shift: data security reviews are no longer a late-stage IT exercise. They are becoming a prerequisite for consideration.

For print providers, the implication is straightforward. Strong data governance is no longer just a compliance requirement. It is becoming a competitive differentiator. Providers that can answer security and AI governance questions confidently move through procurement processes more quickly. Those that cannot risk slowing deals or being eliminated from consideration altogether.

This is where sovereign AI creates a second form of value. Beyond operational improvements, it provides a clearer answer to the questions customers increasingly ask about data ownership, privacy, and control. Because the intelligence is built and retained within the company’s own environment, providers can demonstrate that both customer data and the value created from it remain under their stewardship. In a market where trust is becoming a buying criterion, that may prove as important as the productivity gains themselves.

76%

**print providers who say
transparency with clients about
AI use is important.**

Source: Alliance Insights, AI Adoption in the
Printing Industry, 2025

TECHNOLOGY SPOTLIGHT: CANON'S EMBEDDED INTELLIGENCE

The concept of sovereign AI can seem abstract until it is viewed through the equipment and software that print providers use every day. Canon provides a useful example of how AI and intelligent automation are increasingly being embedded directly into production environments rather than operating as stand-alone tools. Across its portfolio, Canon has integrated AI-driven capabilities into application creation, press operation, workflow automation, and service support.

Three examples — HeightIQ, the Canon imagePRESS V Series, and Canon On Remote Service — demonstrate how AI can improve productivity, quality, and uptime while operating within the provider's existing workflows and controlled operating environment.

HeightIQ: Accelerating High-Value Application Development

HeightIQ illustrates what specialized AI looks like in a production environment. Designed for Canon Arizona flatbed printers running PRISMAelevate XL, the software uses AI-driven image recognition to analyze light, contrast, and shape, then automatically generate the height map required to produce elevated textures, embossing effects, and tactile print applications.

Traditionally, creating these files required significant manual preparation. By automating that process, HeightIQ helps reduce setup time, simplify production, and enables print providers to expand their capacity for high-margin decorative and tactile applications.

imagePRESS V Family: Automation at the Point of Production

The imagePRESS V Family can demonstrate how intelligent automation can be built directly into production equipment. While the ILS (Inline Spectrophotometers) offer automation to color calibration, media profiling, and verification processes, Multi D.A.T. takes over during production by automatically measuring a range of highlight-to-shadow density patches between each sheet for real-time color correction. Then the optional Sensing Unit automates color accuracy checks, front-to-back registration alignment, and secondary transfer adjustments to help achieve consistent output with brilliant color that's delivered easily and fast.

Whether these capabilities meet the technical definition of artificial intelligence is secondary to the tangible business outcomes they offer. By continuously evaluating operating conditions, making real-time adjustments, and optimizing performance, the press helps eliminate the need for constant human oversight to enhance color consistency, help maximize productivity, and reduce manual labor.

CANON ON REMOTE SERVICE: FROM REACTIVE TO PROACTIVE SUPPORT

Canon On Remote Service enables advanced data-driven decision-making beyond production and into equipment support. Using remote connectivity, the platform analyzes operating data to enable technicians to identify potential issues before they become service events and deploys a team to address them with no effort on the customer's part.

This approach shifts maintenance from reactive troubleshooting to predictive intervention based on global data trending from across the fleet, helping improve uptime and equipment performance. Equally important, the system operates on machine-performance data rather than customer job data. It can monitor maintenance needs and optimize service without accessing customer files, content, or proprietary business information.

That distinction reflects one of the core principles of sovereign intelligence technologies. Operational performance can improve while customer data and business intelligence remain under the provider's control.

As AI-based analytics tools advance, Canon's service organization is actively investing in and deploying tools internally to further enhance its proactive service model to further optimize overall performance.

The Broader Lesson

Taken together, these examples illustrate an important shift in how AI is being deployed within print operations. Rather than existing solely as external tools used by individual employees, AI is increasingly being embedded into the systems that create, produce, and support printed products. The value comes not only from automation and efficiency, but from keeping operational intelligence, customer information, and decision-making processes within an environment the print provider controls.

CONCLUSIONS AND RECOMMENDATIONS

The strongest AI strategies recognize that not every AI application serves the same purpose. Public AI tools deliver fast, visible productivity gains. AI embedded within workflows, production systems, and business processes helps create a longer-term operational and competitive advantage. The mistake is treating them as interchangeable. A sound strategy uses each where it creates the most value.

For print leaders, the Alliance Insights AI study points to a clear and practical path. Start with one or two high-value problems where success can be measured, such as estimating, scheduling, invoicing, or customer service. Lead from the top, with executives and managers actively testing and evaluating AI applications rather than delegating experimentation to the edges of the organization. Assign accountability, making AI part of someone's role rather than an optional initiative. Establish guardrails for accuracy, security, and oversight before scaling. Then move deliberately from productivity-focused applications to operational intelligence embedded within the workflows, systems, and processes that drive business performance.

Most importantly, think beyond the tools themselves. Technologies will change. Platforms will evolve. New models will replace old ones. The more enduring question is whether each AI investment helps the organization build knowledge, capability, and intelligence that remain under its control.

The companies that define the next decade of printing will not necessarily be those with the most AI tools. They will be the ones that use AI to strengthen the intelligence of the business itself. They will capture operational knowledge, improve decision-making, automate complex processes, and build systems that become more valuable over time. They will understand the difference between borrowing intelligence from a platform and creating intelligence of their own.

That is the real distinction between the two lanes. One delivers productivity. The other builds capability. The providers that pull ahead will be the ones that recognize the difference and invest accordingly.

And if AI tools disappeared tomorrow, they would still be able to answer with confidence what knowledge, processes, and intelligence remain theirs.

