Wide Format Reimagined

Automation, AI and a Path to Sustainable Growth

October 21, 2025

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Thank you, **Roger and Gail!**

Innovation and Growth Through Strategic Partnerships

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ONCE UPON A TIME…

ERA	DIGITAL KEY CHARACTERISTICS	IMPACT ON PRINT INDUSTRY
1990s	Emergence of digital printing, toner-based systems	Increased customization, faster turnaround times
2000s	Wider adoption of digital workflows	Improved efficiency, reduced costs
2010s	Integration with online platforms, mobile access	Enhanced accessibility, broader market reach
2020s	Automation, AI, sustainability	Rapid transformation, new business models

The transformation driven by automation and AI is **unfolding in real time—faster and more disruptive** than the 30 years of digital print we have encountered within our industry.

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Agenda

Wide Format Reimagined

Automation, AI and a Path to Sustainable Growth

Why Now

Industry Data

Keys To A Sustainable Business

Robotics

Wrap & Questions

References

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Acknowledge Today's Realities

Why Now? A Pathway to Sustainable Growth

- Uncertainty is rising:
  - Tariffs
  - Geopolitical unrest
  - Inflation
  - Supply chain disruptions
- **But certainty has never truly existed** — every era brings challenges
- *The goal: reframe difficulties, not minimize them*

Automation is more than a tool—it's a strategic opportunity

- We can begin to mitigate today's risks and prepare for tomorrow's unknowns.
- Automation offers a pathway not just to efficiency, but to resilience, adaptability, and sustainable growth.

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A Why Now Quiz

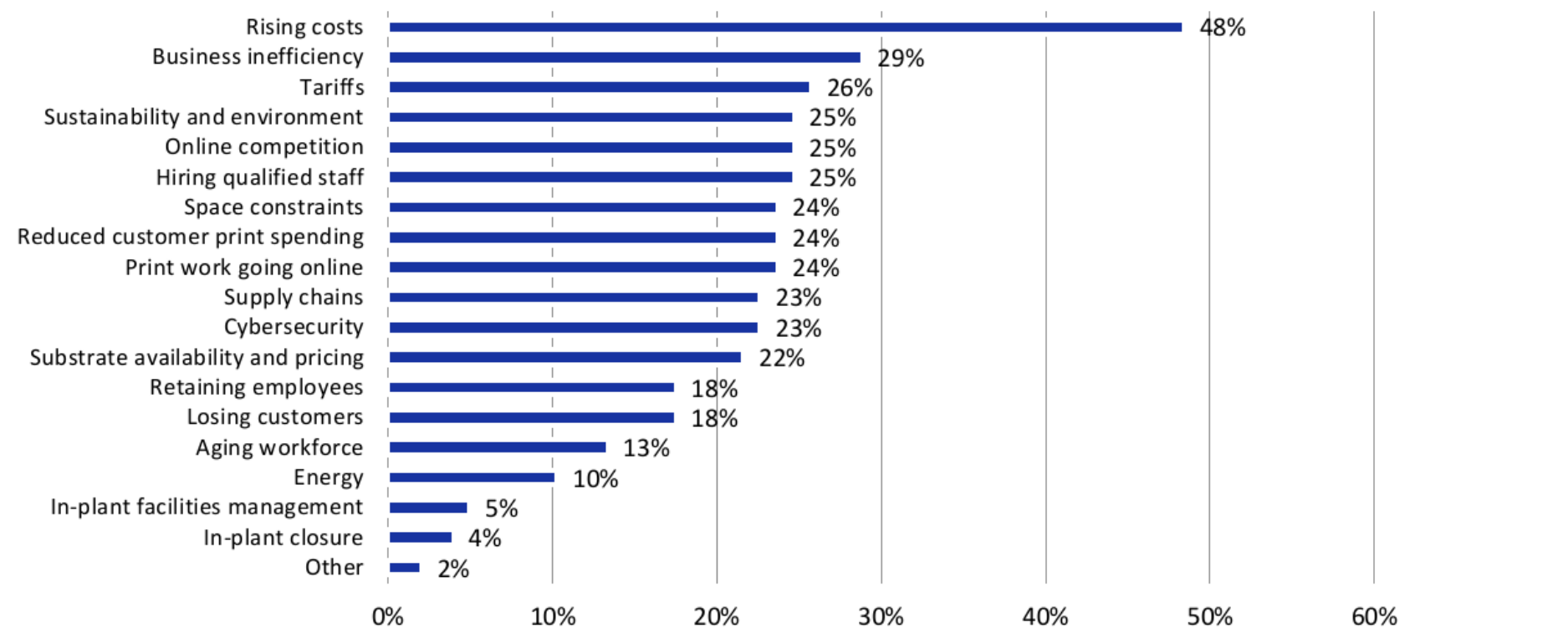| What is the average age of employees in our industry? (Print Industry)	What is the current reported utilization rate of digital production equipment?	What percentage of total software expenditure is attributed to digital print shops compared to wide format print shops?
A. 26	A. 85%	A. 1:1
B. 56	B. 73%	B. 2:1
C. 43	C. 60%	C. 1:2
D. 33	D. 93%	D. 3:1
C	B	D
Printweek, Zippia, piaworld	*Fred.stlouisfed, ibisworld, gitnux*	*shopvox, piaworld*
36% is between the age of 51 to 60	Industry Benchmark 80 to 85% KPI studies indicate in-plant and and GC PPs are running 60 to 75%	Nature of production, customer, lower volume, cost sensitivity, Awareness & education

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Let's take a quick look at some **industry data** – that might help bring our conversation into **focus**.

Which of the following factors are significant business concerns for your operation?

Factor	Percentage
Rising costs	48%
Business inefficiency	29%
Tariffs	26%
Sustainability and environment	25%
Online competition	25%
Hiring qualified staff	25%
Space constraints	24%
Reduced customer print spending	24%
Print work going online	24%
Supply chains	23%
Cybersecurity	23%
Substrate availability and pricing	22%
Retaining employees	18%
Losing customers	18%
Aging workforce	13%
Energy	10%
In-plant facilities management	5%
In-plant closure	4%
Other	2%

N=97 Total Respondents in North America
Source: *North American Software Investment Outlook*; Keypoint Intelligence 2025

Multiple Responses Permitted

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Let's take a quick look at some **industry data** – that might help bring our conversation into **focus**.
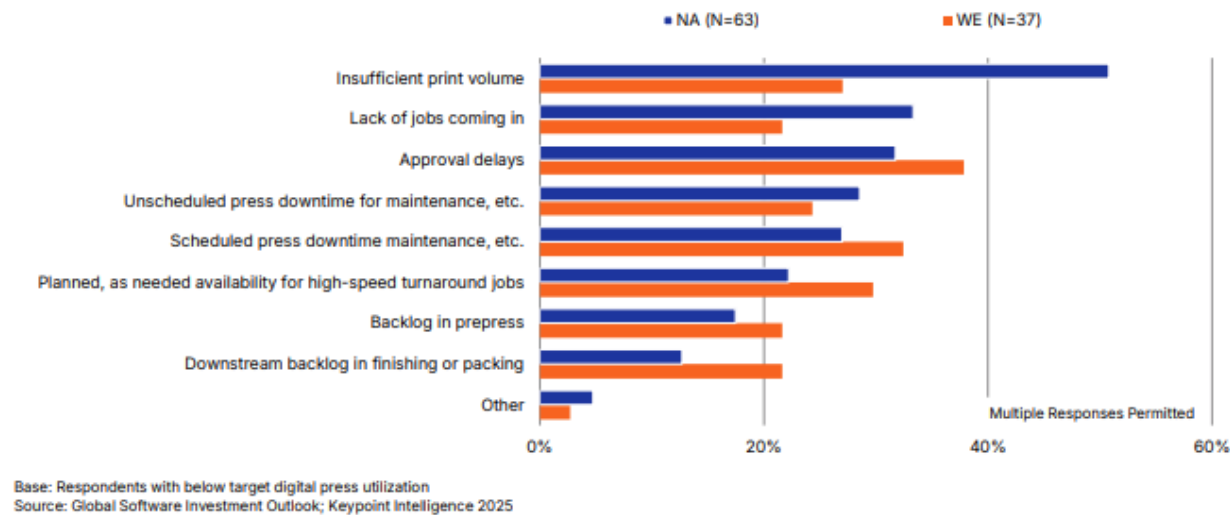
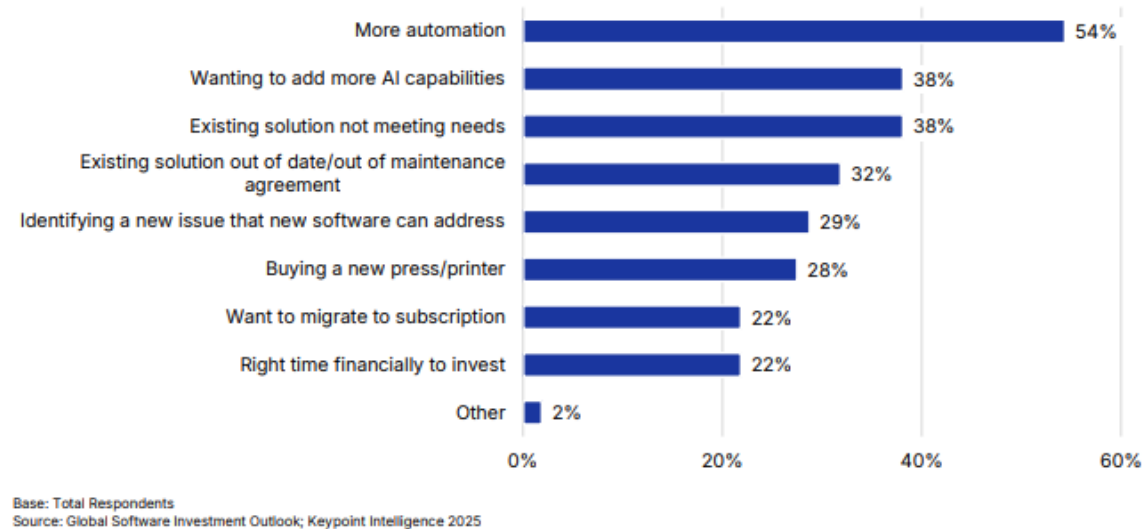Figure 5: Below Target Press Use by Region

- NA (N=63)   - WE (N=37)

Insufficient print volume	
Lack of jobs coming in	
Approval delays	
Unscheduled press downtime for maintenance, etc.	
Scheduled press downtime maintenance, etc.	
Planned, as needed availability for high-speed turnaround jobs	
Backlog in prepress	
Downstream backlog in finishing or packing	
Other	

Multiple Responses Permitted

0%   20%   40%   60%

Base: Respondents with below target digital press utilization
Source: Global Software Investment Outlook; Keypoint Intelligence 2025

Figure 11: Reasons for Purchasing Print Production Software

More automation	54%
Wanting to add more AI capabilities	38%
Existing solution not meeting needs	38%
Existing solution out of date/out of maintenance agreement	32%
Identifying a new issue that new software can address	29%
Buying a new press/printer	28%
Want to migrate to subscription	22%
Right time financially to invest	22%
Other	2%

0%   20%   40%   60%

Base: Total Respondents
Source: Global Software Investment Outlook; Keypoint Intelligence 2025

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The solution to today's operational challenges—and those yet to come—lies in **automation and robotics**. But not just any solutions: ones designed to meet the unique demands of the print industry, from the moment jobs and materials enter the facility to the final product's exit.

End-to-end automation is **no longer a luxury**—it's the key to sustainable success.

Keys to Successful Automation in Print

- ROI
- End-to-End Integration
- Scalability & Flexibility
- Data Driven Decision Making
- Workforce Enablement
- Customer Experience Enhancement
- Robust Support & Partnership

How would you prioritize these?
1.
2.
3.

As we expand on these topics, I'm going to reference a customer(s) where we have executed wide format automation that have **met and exceeded their expectations** as well as **grew** their business.

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For customers exploring automation, **the true value** of **automation and robotics** lies in **measurable ROI**—and that's exactly what these solutions deliver.

Question:

- What is your ideal timeframe for seeing a return on investment from automation?

- And how about for robotics?

Results:

- We've seen return on investment from automation as low as <7 months?

- We've seen return on investments from robotics as low as 14 months?

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End-to-End Integration

Question:

- How many have automation, in one fashion or another, deployed today?
    - Where would you say your automation resides?
        - Prepress
        - Production
        - Finishing
    - Our industry suffers from *islands of automation*. How many shops look like the following:


- ***End-to-End Solutions*** are key to a sustainable print business.
    - Repurposing employees to key tasks that can't be automated is crucial.
- Let's discuss the challenges of **JDF** for automation and how those challenges are overcome.

Scalable & Flexible

- Print Providers must ask the scalability question
  - The answer is going be "yes"
    - Your next question must be how and share an example of where you have performed this for a customer.

- This is an **example of scalability afforded everyone** who fabricates a produces for wide format.
  - Your system(s) and on-going support should allow for the following as an example:
    - Automation for signs within prepress and within finishing
    - Standardize file submission from various creators
      - Confirm correct color-space and resolve if error found
      - Verify image resolution (AI repair)
    - Connect and provide integration to new MIS solution
    - Signage and or décor installation (AI enabled confirmation)
      - Geo-tagged photos confirm correct location and panel positioning
    - Sheet-fed ink-jet workflows are currently under development
      - All from the original Wide Format automation deployment.

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Data Driven Decisions

- Whether through automation or robotics, the data generated—and the feedback loop it creates—is essential for driving greater efficiency and profitability.

  - Why it's true:
    - Data-driven insights help identify bottlenecks, reduce waste, and optimize workflows.
    - Feedback loops allow systems to self-correct, improve accuracy, and adapt to changing demands.
    - Predictive analytics from collected data can guide smarter decisions and proactive maintenance.
  - Agentic Intelligence can further help you grow your business, and you have options from which to choose.

Workforce Enablement
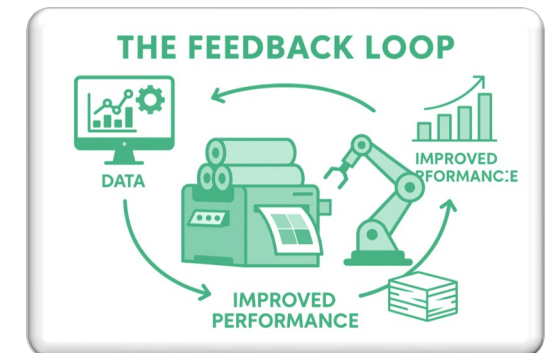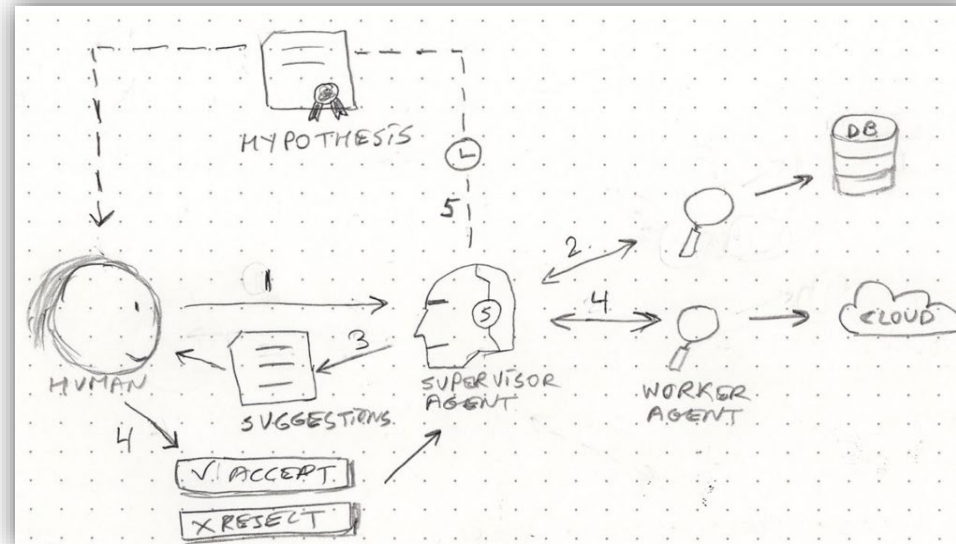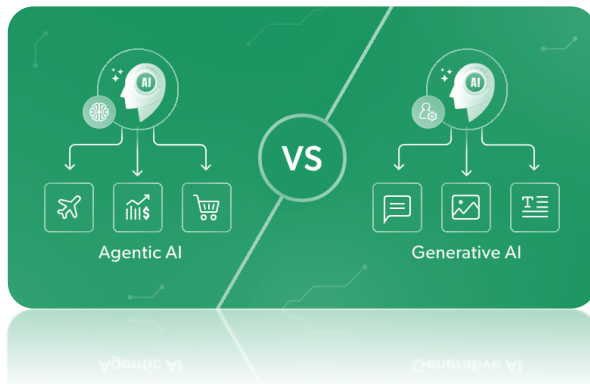
Enhancing productivity, safety, and skills development by transforming routine tasks into opportunities for innovation and growth. The positives for employees where automation is deployed:

1. **Reducing Repetitive Tasks.**
    -   Freeing up employees to focus on more strategic, creative, or customer-facing work
2. **Improving Safety and Ergonomics**
    -   We shared where workman's compensation premiums could be reduced.
3. **Upskilling Opportunities**
    -   Automation won't replace people's jobs people who don't use automation will have their jobs replaced.
4. **Job Satisfaction**
    -   By removing mundane tasks and enabling more meaningful work, automation can lead to higher job satisfaction and employee engagement.

"…*automation hasn't just doubled output—it transformed the workplace, eliminating hazardous tasks and empowering employees to focus on higher-value work, resulting in a noticeable boost in morale and job satisfaction*."

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Ricoh Industrial Services

ENGAGE360

A customer seeking to automate the production of signs involving VDP, nesting, cutting, and drilling achieved a dramatic transformation: the **workflow was reduced from 40 hours to just 6 minutes**, and sign **turnaround times improved from 4 weeks to only 1 week**—significantly enhancing the customer experience.

1. **Faster Turnaround Times**
   - Automation streamlines production processes—like cutting, printing, and finishing—reducing lead times and enabling quicker delivery. Customers benefit from faster service without sacrificing quality.

2. **Consistent Quality and Precision**
   - Automated systems ensure repeatable accuracy in sign and graphics production, minimizing errors and inconsistencies. This leads to higher customer satisfaction, especially for **clients with strict brand standards** or large-scale orders.

3. **Real-Time Order Tracking and Communication**
   - Integrated automation often includes digital workflow systems that allow customers to **track their orders, receive updates, and communicate changes more easily.** This transparency builds trust and improves the overall experience.

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Robust Support & Partnership

In an industry where **precision, speed, and efficiency define success**, automation and robotics are no longer optional—they're essential. And when that **support comes from a company** that not only leads the print industry but **deeply understands its complexities,** the results are transformative."

Why Trust a Print Industry Leader for Automation & Robotics

- **Deep Industry Expertise – Proven Track Record**
  - A print-focused manufacturer understands the unique challenges, workflows, and materials involved—ensuring solutions are purpose-built, not generic.
  - Leaders in the print industry bring decades of experience and successful implementations, reducing risk and increasing confidence in ROI.
- **Tailored Integration**
  - Solutions - hardware, software and workflows designed specifically for print environments, including VDP, nesting, cutting, and finishing—maximizing efficiency and compatibility.
- **Faster Time to Value**
  - With pre-configured workflows and deep integration capabilities, industry leaders accelerate implementation and results.
- **Scalability & Future-Proofing**
  - Their solutions evolve with the industry, ensuring your automation investments remain relevant and competitive.
- **Strategic Vision**
  - They don't just sell equipment—they help shape the future of print, guiding customers through transformation with insight and leadership.

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Robots

Robotic Use Case

- A customer processed 4,500 boards over a two-month period using a robot that handles each board in an average of two minutes.

- By automating this task, the customer **gained approximately 150 hours of production** capacity during that time.

- That's equivalent to **nearly a full month of labor**, which was redirected to more strategically valuable activities within the business.

The robot has allowed them **to be competitiv**e in tasks that were **previously beyond their capacity**. Simply because they can now pull a person out and let the robot take over the task.

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Wrap-Up Summary

- Automation and robotics are **no longer optional—they are essential for long-term sustainability** and competitiveness in today's wide-format print industry. To fully realize their potential, **AI-enabled tools must be properly implemented** and interconnected across the workflow. Isolated systems—often referred to as **"islands of automation"—limit efficiency and hinder scalability.**

- Like past industrial revolutions, **AI** is **transforming** the nature of **work, not eliminating it.** While the types of **jobs will evolve**, opportunities will grow for those who embrace and adapt to these technologies. "AI won't replace people—it will replace those who choose not to leverage its capabilities."

- We invite you to continue the conversation with us in our **Booth #5621**

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Questions?

Thank you.

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