

BMI Outlook

2023

- Pendulum swinging with inventory levels
- Pricing more of a factor back to offshoring
- Paper sales slowed greatly
- Sustainability continues to become a top issue
- Printers adding technology and capacity
- Continued M&A

2024

- One word Uncertainty
- Amazon growing its own print base; new rules?
- Demand from publishers
- Paper mills/machines
- Push to digital printing and smaller runs
- Sustainability adoption and/or regulation
- Geopolitical and economic concerns





STATE OF THE BOOK INDUSTRY

- Turbulent seas are calming, with challenges and opportunities on the horizon.
- The paper situation is settling after years of supply difficulties.
- Demand is still strong, trending above prepandemic levels.
- Threats include potential outsourcing and sustainability concerns.
- Opportunities in production inkjet printing and a strong domestic sustainability story.



Image by Jim Cooper from Pixabay



Image by Erik Tanghe from Pixabay

INDUSTRY SNAPSHOTS: SALES ARE STRONG

- Demand is strong. Volume in 2023 was 767 million units, per Circana.
 - Below 2022 levels, but still way up from 2019.
- Adult fiction is among the strongest segments, with a nearly 1% growth over 2022.
- Children's books saw a decline 13.5 million units below 2022.
 - Middle-grade books (for children 8 to 11), saw a decline of 10%.
 - These children were impacted by the pandemic, in that schools and libraries were closed during these crucial formative years.

767 Million units sold in 2023

Down 3% from 2022

But, up 11% compared to 2019

Source: Circana



- The forecasted recession in 2023 never materialized and a recession is not anticipated in 2024.
 - However, Wall Street Journal reporting indicates that there may be periods that feel like a recession this year.
- Print industry employment has increased since Q4 2023 (currently 369,000), though it is still well below the prepandemic employment of 419,000.
- Hiring and workforce development remains a challenge.
 - Unemployment is below 4%, which has resulted in a diminished labor pool.
 - Print service providers cite hiring production and sales staff as a moderate to critical challenge.

PRINTING INDUSTRY EMPLOYEE LEVELS, IN THOUSANDS

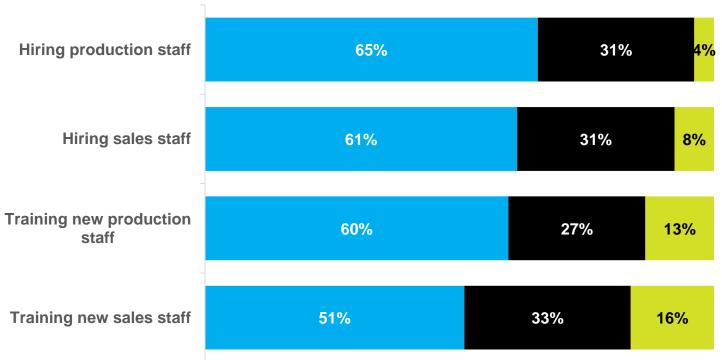


Source: U.S. Bureau of Labor Statistics

- Hiring and workforce development remains a critical issue across the printing industry.
- In a NAPCO Research survey of commercial printers, 65% stated hiring production staff is a critical/moderate challenge. 61% stated hiring sales staff is a critical/moderate challenge.
- Less than 10% of respondents stated that these issues posed no challenge at all.

Hiring and Training are Top Challenges

Q. Please describe the challenge the following present to your company.



n=104 North American commercial printers

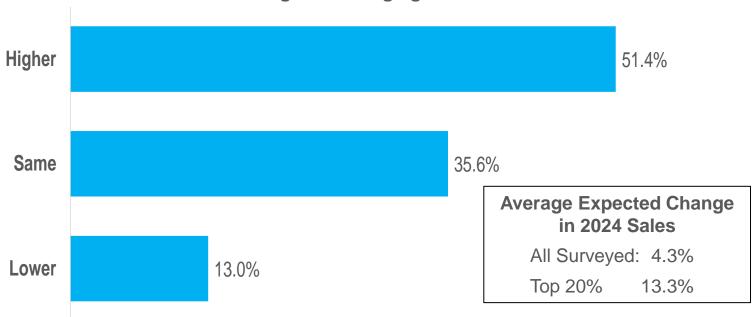
Source: NAPCO Research Annual Commercial Print Industry Trends and Strategies Service, 2023



- Threats of recession have largely been avoided, though economic challenges persist:
 - Inflation
 - Interest rates
 - Weak manufacturing job growth
 - Supply chain
 - Election year uncertainty
- There is optimism for sales growth in the overall printing industry, though moderate growth (4.3% on average) is expected.

Print Sales Expectations: 2024 vs. 2023

A little more than half of SOI participants expect to increase sales this year. On average, sales are expected to increase sales 4.3%, with the top fifth expecting gains averaging 13.3%.



Source: PRINTING United Alliance State of the Industry Update, Q3 2023, Sponsored by Canon U.S.A.



Q. How much of a concern do you expect the factors below to be for your company during the first half of 2024?

Factor	Major Concern	Moderate Concern	Minor Concern/ Not a Concern
Maintaining profitability	66.5%	20.6%	12.9%
Increasing sales	66.3%	21.3%	12.4%
Rising labor costs	55.0%	29.2%	15.8%
Rising energy costs	43.5%	25.9%	30.6%
Maintaining productivity	42.4%	33.5%	24.1%
Losing clients to print alternatives	41.1%	26.2%	32.7%
Maintaining healthy cash/working capital balances	40.8%	27.8%	31.4%
Rising transportation costs	38.2%	30.6%	31.2%
Tighter credit conditions/elevated interest rates	36.7%	27.7%	35.5%
Labor shortages	33.3%	26.8%	39.9%
Rising substrate costs	30.6%	31.8%	37.6%
Rising ink/toner costs	25.3%	27.1%	47.6%
Material shortages/inability to acquire materials needed	7.6%	23.5%	68.8%

n=166

Source: PRINTING United Alliance State of the Industry Update, Q3 2023, Sponsored by Canon U.S.A.

Profitability, sales, and labor and energy costs are top concerns

Material /
consumable
costs and
material
shortages are
lowest
concerns

BOOK INDUSTRY STABILIZING

 Since the pandemic, the book manufacturing industry has been marked by unpredictability:

Paper Shortages

The paper shortages that marked the pandemic years have lessened.

Only 7.6% of PRINTING
United Alliance State of
the Industry participants
view material shortages as
a major concern.

Excess Inventory

Book manufacturers have been largely successful in working down their excess paper inventory, as have publishers in selling off excess inventory of warehoused books.

Varied Buying Cycles

The industry is acclimating as demand does not follow the exact patterns of the past and adjusting for evolving consumer purchasing behavior.

THE ONGOING QUESTION OF OFFSHORING

- The threat of offshoring is not new but is something that book manufacturers must be mindful of as they position themselves for the future.
- Understanding the domestic production advantage is key to keeping work in North America.
- High-volume offset printing overseas offers an affordable option for publishers, but potential pitfalls are lurking.

The Domestic Production Advantage

- Production occurring closer to distribution
- Reduction of lengthy shipping times and potential delays
- Affordable low-volume production and on-demand printing
- Production flexibility improves potential inventory concerns
- Opportunities for smaller printers to capture work previously unattainable

THE INKJET ADVANTAGE IN BOOK PRODUCTION

- Production inkjet printing is providing flexibility for printers and publishers as the technology continues to take hold in the industry.
- Quick production and delivery of books is particularly beneficial in times of unpredictable demand.
 - le: BookTok and the ability for previously unknown books to gain rapid popularity
- Test marketing opportunities print books in a small quantity before committing to a high-volume run.
- Ability to order in lower volumes more frequently
- Color and quality no longer a concern



Image by Hermann Kollinger from Pixabay

- Overall, book demand has dropped compared to the pandemic years, but is still above 2019.
- Per *Publishers Weekly*, in the trade segment, sales were down 2.6% in 2023 compared to 2022.
- However, compared to prepandemic (2019) sales are still up.

2019 sales: 694M

2023 sales: 767M

2023 sales: 767 Million Books

2019 sales: 694 Million Books

Despite post pandemic declines, why have book sales remained strong in the post-COVID world?

- The rediscovering of reading that occurred at the height of the pandemic has not entirely faded.
- Ecommerce has made finding and buying books easier than ever. Sales have remained strong despite declining bookstore sales.
- Social media impact: BookTok and other online communities have changed the way consumers discuss and share book recommendations.

"It's clear that many people rediscovered their love of reading last year. And that publishers were able to deliver the entertaining and thought-provoking books that so many of us needed."
-Stephen Lotinga, Chief Executive, Publishers Association World Economic Forum, May 2021

UNIT SALES OF PRINT BOOKS BY CATEGORY (in thousands)					
	2022	2023	CHANGE		
Adult Nonfiction	293,850	284,648	-3.1%		
Adult Fiction	189,342	190,878	.8%		
Juvenile Nonfiction	65,987	61,331	-7.1%		
Juvenile fiction	187,942	179,147	-4.7%		
Young adult fiction	31,046	31,620	-1.8%		
Young adult nonfiction	4,430	4,271	-3.6%		
Total	787,648	767,356	-2.6%		

- Slight dips across trade segments, with the exception of Adult Fiction
 - Up 0.8%
- Largest drops
 occurred in nonfiction
 segments
- YA and juvenile fiction declines mark a shift in trends

Source: Publishers Weekly

What's driving trends in fiction book buying?

- Adult fiction sales have increased, largely driven by BookTok:
 - Ex: Colleen Hoover books dominate the top 10 in sales: It Ends with Us (#1), It Starts with Us (#2), Verity (#9)
- Young adult and juvenile fiction sales have decreased:
 - In YA, many point to the decline of the affordable paperback, lack of teenage main characters and YA that is more adult in nature.
 - In juvenile fiction, middle-grade readers have been affected by the pandemic years when schools were remote and libraries were closed.

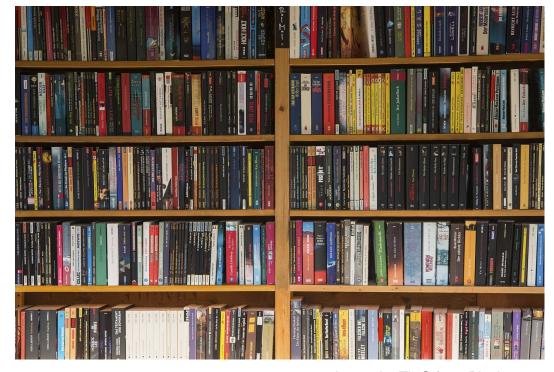


Image by Th G from Pixabay



Academic sector benefits from digital and physical content:

- The expected digitization of educational content has not eliminated printed material in the classroom.
- A combination of digital and printed content has proven to be beneficial for students, as learning and retention is improved by physical material.
- The traditional, hardcover textbook could be phased out however. Providing new opportunities for digital book printing.

"...the device seems to attract young children's attention at the expense of attention paid to the storyline..."

May Irene Furenes, Natalia Kucirkova, Adriana G. Bus A Comparison of Children's Reading on Paper Versus Screen: A Meta-Analysis

"...when the reading assignment demands more engagement or deeper comprehension, students may be better off reading print."

Patricia A. Alexander and Lauren M. Singer Business Insider



Academic sector benefits from digital and physical content:

- Digital content is still valuable in academic settings due to its speed, interactivity, personalization, and variability.
- Good for addressing overarching concepts or "big ideas."
 - Supplement with printed material when more detailed comprehension is needed.
 - EdTech companies now incorporating print components to supplement digital content.
- Old models of hardcover textbooks that remain in classrooms for years are being challenged. Softcover workbooks that students can write in and tear pages from present new opportunities for new technologies.



Image by Nadine Doerlé from Pixabay

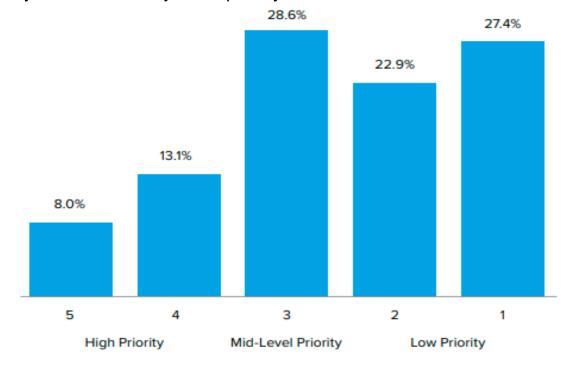
SUSTAINABILITY CHALLENGES ON THE HORIZON

n=175

What to be Aware Of:

- European Carbon Tax
 - Imports into Europe must report greenhouse gas emissions tied to their products
 - Payments go into effect in 2026
 - Still TBD how this will be finalized
- Extended Producer Responsibility
 - More of a concern in other print segments, but still worth monitoring
 - Four states have passed packaging EPR laws, with Maryland and New York in consideration phases.
- Overall industry perception
 - The PR battle is a challenge, but there are resources available to win over print industry skeptics

Q. Currently how high a priority is sustainable, eco-friendly, green manufacturing for your company? Please rate from 5 for currently a high priority to 1 for currently a low priority.



Source: PRINTING United Alliance, State of the Industry, Q3 2023, Sponsored by Canon U.S.A.