Print Business Indicators Research

A Path Forward

Produced by the PRINTING United Alliance and NAPCO Research for its members.

Volume 2, Number 3 | AUGUST 2021

Staying on top of industry trends is essential to your success.

Throughout the year, PRINTING United Alliance's research team creates top-notch reports for the industry and works with consultancies to conduct commissioned research.

PRINTING United Alliance members get unlimited access to the resulting reports, featured here, that reflect the scope of the printing industry.

If you have any questions, please contact ResearchTeam@printing.org.

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Introduction

This is the sixth in a series of reports PRINTING United Alliance and NAPCO Research have created to examine the effects of the COVID-19 crisis on the printing industry, how printers are responding to the crisis, and how they can create a path forward.

The research is based on an industrywide survey that includes commercial printers, graphic and sign producers, apparel decorators, functional printers, and package printers/converters. (Participants are profiled in Section 1.)

Indicators tracked include percent change in sales over year-earlier levels, employment, prices, quote activity, work on hand, and confidence. Each survey also investigates critical issues such as where participants see opportunity post-COVID-19, what concerns them most, which capital investments they are planning, and which product markets they believe have the most growth potential.

Participant comments on current and expected business conditions put the numbers in context. An analysis of the American economy's likely course and what it would mean for the printing industry supplements the survey results.

For information about COVID-19 Printing Business Indicators Research, please contact our research team at: researchteam@printing.org.

The COVID-19 Research Panel

Having a representative panel of regular participants in COVID-19 Print Business Indicators Research enhances our research capabilities and allows us to provide more accurate and reliable data. By having a large pool of consistent respondents, we are able to increase the comparability of the data from survey to survey and reduce the nonresponse bias that is often a major source of error in survey data.

Building a panel also supports our ability to cultivate relationships with participants. By opening a line of communication with panel members, we can gain additional insight that goes beyond the scope of the survey questions. These interactions allow us to create a more detailed report and provide us with information that helps develop future surveys.

When you join the panel, you will not be required to provide any additional information. You simply agree to participate regularly in the surveys used to create this report. By doing so, you will receive an enhanced version of the report that includes additional information that can better help your business navigate this challenging environment.

The latest version of the panel report contains additional information and insight, including sections on:

- An in-depth economic and industry update
- Insight on how cost inflation is affected the industry and how the Fed may react

It also includes must-dos that provide actionable steps to help you avoid falling behind during the recovery:

- Becoming an employer of choice
- Building employee engagement
- Creating an employee value proposition

To join the COVID-19 Print Business Indicators Panel, please click here.

For a sample copy of a Panel report or for more information about the panel, please contact David Wilaj, economist, PRINTING United Alliance, dwilaj@printing.org, or Andy Paparozzi, chief economist, PRINTING United Alliance, apaparozzi@printing.org.

Executive Summary

More than 150 printing companies from across the United States and Canada participated in the sixth PRINTING United Alliance/NAPCO Research COVID-19 Print Business Indicators Survey. Topics included percent change in year-over-year first quarter sales; expectations for second-quarter and full-year 2021 sales; current trends in confidence; labor market data, including data on how shortages are being addressed and the difficulties of getting employees to return to work; operating cost data, including how many are experiencing increases, how much costs are increasing, what costs are increasing, and how they are offsetting these increases; and where companies plan to make capital investments.

Key Findings

- Second-quarter sales were up for 74.2% of respondents when compared to the same period last year. The median change was 15.0%. Both numbers are up compared to the first quarter, in which only 34.8% of companies experienced higher sales, and the median change was -10.2%.
- Key indicators are trending upward across the board as 66.7% of respondents are experiencing more quote activity and 69.9% say that work on hand is increasing.
- Payroll production hours are also trending upward for more than half (55.8%) of all respondents.
- Approximately two-thirds (64.3%) of respondents are expecting business to continue to improve in the month ahead, as they indicated that their confidence level was increasing. This is significantly higher than the 30.7% who said the same to end 2020.
- The industry continues to face labor shortages, as 68.6% of respondents indicated that they are having trouble hiring, while 26.3% mentioned that they are struggling to get employees to return to work.
- Cost inflation continues to be a concern, as 91.0% said that per-unit costs are up this year, with an average increase of 10.0%. 51.1% of these increases have been offset by raising prices, while another 31.3% have been absorbed. The remaining 17.6% have been offset by increased efficiency.
- GDP grew by 6.5% last quarter, which was lower than the 8.0%-9.0% that was anticipated.
- We anticipated industry sales to grow between 5.5% and 6.5% this year — up significantly from the -17.8% decrease seen throughout 2020.
- The index of current indicators (73.9) and the index of leading indicators (78.3) both reached their highest mark since this research began in the first quarter of 2020 as key indicators continue to improve across the board for all segments.
- 54.3% of commercial printers plan to make investments over the next 12 months, with more than 61.0% of this investment coming in the form of some type of inkjet device.

Section 1: Participant Profile

Number surveyed: 159

Company Size: 2020 Sales (all sources)

2020 Sales	Percent
$500,000 or less	19.5%
$500,000 to $1,000,000	7.0%
$1 million+ to $3 million	22.2%
$3 million+ to $5 million	13.3%
$5 million+ to $10 million	12.0%
$10 million+ to $20 million	10.1%
$20 million+ to $40 million	7.0%
$40 million+ to $60 million	5.7%
$60 million+ to $100 million	1.3%
$100 million+	1.9%

Primary Printing Segment

Segment	Percent
Commercial printer	54.7%
Graphic and sign producer	14.5%
Package printer/converter	5.7%
Functional printer	4.4%
Apparel decorator	4.4%

Section 1: Participant Profile

Location

Location*	Percent
United States	**91.8%**
West	**18.9%**
Pacific	10.7%
Mountain	8.2%
Midwest	**29.6%**
Plains	9.4%
North Central	20.1%
South	**20.1%**
South Central	3.8%
Southeastern	16.4%
East	**23.3%**
South Mid-Atlantic	5.7%
North Mid-Atlantic	14.5%
New England	3.1%
Canada	**3.8%**

* **Pacific:** Alaska, California, Hawaii, Oregon, Washington. **Mountain:** Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming. Plains: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota. **North Central:** Illinois, Indiana, Michigan, Ohio, Wisconsin. **South Central:** Arkansas, Louisiana, Oklahoma, Texas. **Southeast:** Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee. **South Mid-Atlantic:** Delaware, District of Columbia, Maryland, Virginia, West Virginia. North Mid-Atlantic: New Jersey, New York, Pennsylvania. **New England:** Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.

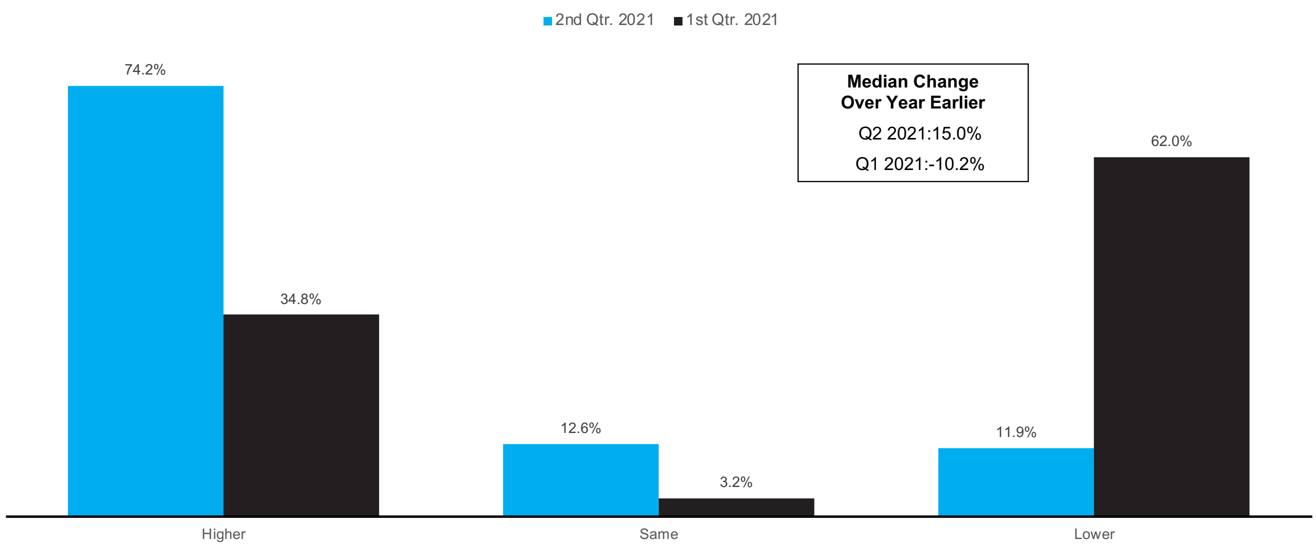
Section 2: What The Indicators Tell Us

Recovery has begun across the printing industry. Sales are growing, and work on hand, production hours, and confidence are trending higher. But labor shortages and rising costs for everything from substrates to shipping are big problems. Nothing suggests the labor shortages will ease soon. And no one knows how transitory cost inflation will be, because no one has ever shut down and reopened the $19 trillion American economy. The takeaway: Maximizing efficiency, squeezing steps out of processes, and working smarter company-wide will be as important during recovery as it was during recession.

Widespread Gains

Sales surpassed year-earlier levels last quarter for 74.2% of the companies we survey, triple the 24.5% for whom sales were unchanged (12.6%) or lower (11.9%). Sales were up 10.0% or more for 64.0%, 20.0% or more for 47.3%, and 30.0% or more for 38.0%. The median change in sales: 15.0%. As Figure 1 shows, that's very different from the first three months of the year, when sales increased for 34.8%, decreased for 62.0%, and the median change was -10.2%.

Figure 1: How Sales Compare With Year-Earlier Totals



Q. How did your sales (all sources) for the calendar quarter indicated compare with year-earlier levels?
n=158

Companies that are growing repeatedly reminded us to keep the gains in perspective: "Things are starting to get better, but we're still well below pre-COVID-19 volumes." Companies that are not growing talked primarily about permanent losses — "Many old customers went out of business. We are in the process of marketing to increase sales" — and one-time boosts — "We had COVID-19 safety products that greatly increased our sales during the second and third quarters of 2020. We don't expect those sales to be as strong in 2021 as the pandemic closes."

Section 2: What The Indicators Tell Us

Quote activity increased last quarter for 69.9% of our research group, work on hand for 66.7%, and production payroll hours for 55.8%. Additionally, 64.1% expect business to improve during the month ahead, while just 3.8% expect the opposite. As Figure 2 shows, all are significant improvements over the previous two quarters.

Figure 2: Key Indicators Trending Higher

Indicator	Current Trend	2nd Qtr. 2021	1st Qtr. 2021	4th Qtr. 2020
Quote Activity	**Increasing**	**69.9%**	**50.0%**	**33.9%**
	Staying the Same	23.1%	29.9%	38.1%
	Decreasing	7.1%	20.1%	28.0%
Work on Hand	**Increasing**	**66.7%**	**36.7%**	**33.9%**
	Staying the Same	21.8%	32.7%	35.8%
	Decreasing	11.5%	30.6%	30.3%
Payroll Production Hours	**Increasing**	**55.8%**	**29.0%**	**28.4%**
	Staying the Same	36.5%	45.9%	48.2%
	Decreasing	7.7%	25.1%	23.4%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing.
n=156

Indicator		2nd Qtr. 2021	1st Qtr. 2021	4th Qtr. 2020
Confidence	**Improve**	**64.1%**	**59.1%**	**30.7%**
	Stay the Same	25.0%	25.8%	35.3%
	Decline	3.8%	4.7%	20.6%
	Not Sure	7.1%	10.4%	13.3%

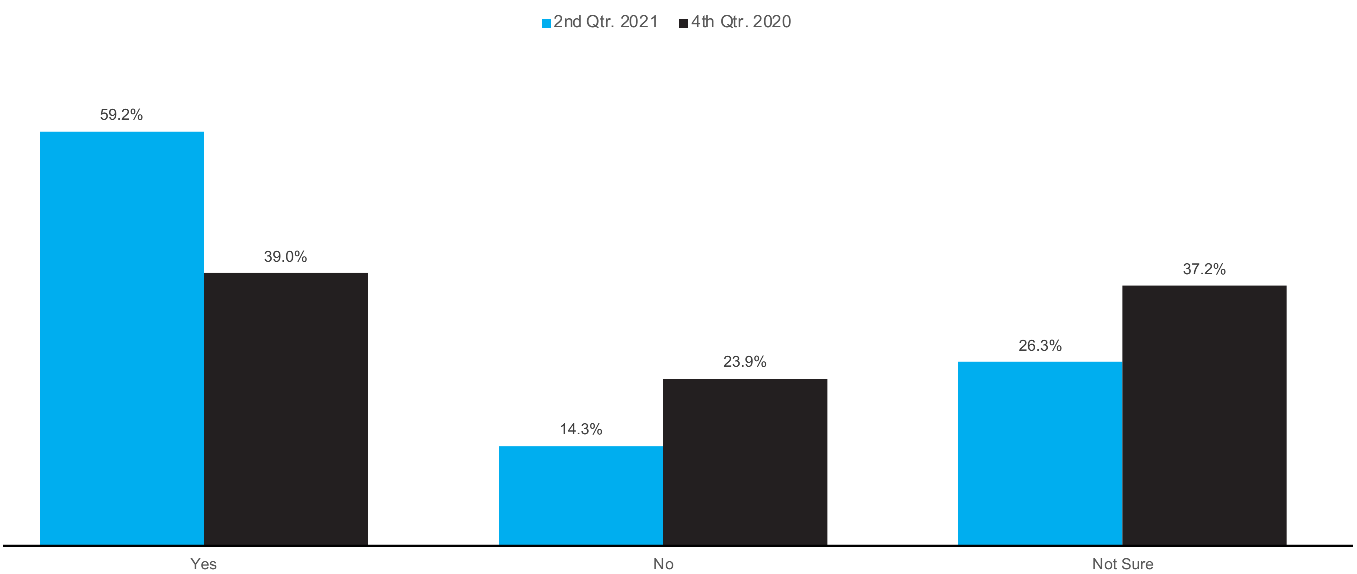
Q. In relation to current conditions, do you expect business conditions for your company to improve, stay the same, or decline?
n=156

Section 2: What The Indicators Tell Us

The upturn in activity and confidence has boosted expectations for full-year 2021 and capital investment plans. Among the specifics for companies surveyed:

- 72.6% expect this year's sales to exceed last year's sales, while 5.6% expect no change, 8.5% expect a decline, and 12.7% aren't sure how this year will compare with last year. Nearly two-thirds (66.4%) expect an increase of at least 10.0%, 44.3% an increase of at least 20.0%, and 25.7% an increase of at least 30.0%. For some, the expected gains are market specific: "Pent-up demand for schools and municipalities — our two target markets — is increasing and driving revenue." For others, it's a broad-based upturn: "The economy and our markets are in a strong recovery mode." And for others its actions they are taking: "We have been successful in landing some totally new customers that are driving our sales increase. The new business is coming from expanded product lines."
- 59.2% plan to make a capital investment over the next 12 months, 14.3% do not plan to invest, and 26.3% are not sure whether they will invest or not. At the close of 2020, just 39.0% planned to invest, 23.9% did not plan to invest, and 37.2% were not sure what they were going to do. (See Figure 3.)

Figure 3: Capital Investment Plans



Q. Do you plan to make a capital investment during the next 12 months?
n=152

As with sales, all these indicators benefit from comparison with the deeply depressed levels of a year ago, when COVID-19 had the American economy locked down. Nevertheless, they are an encouraging first step toward recovery.

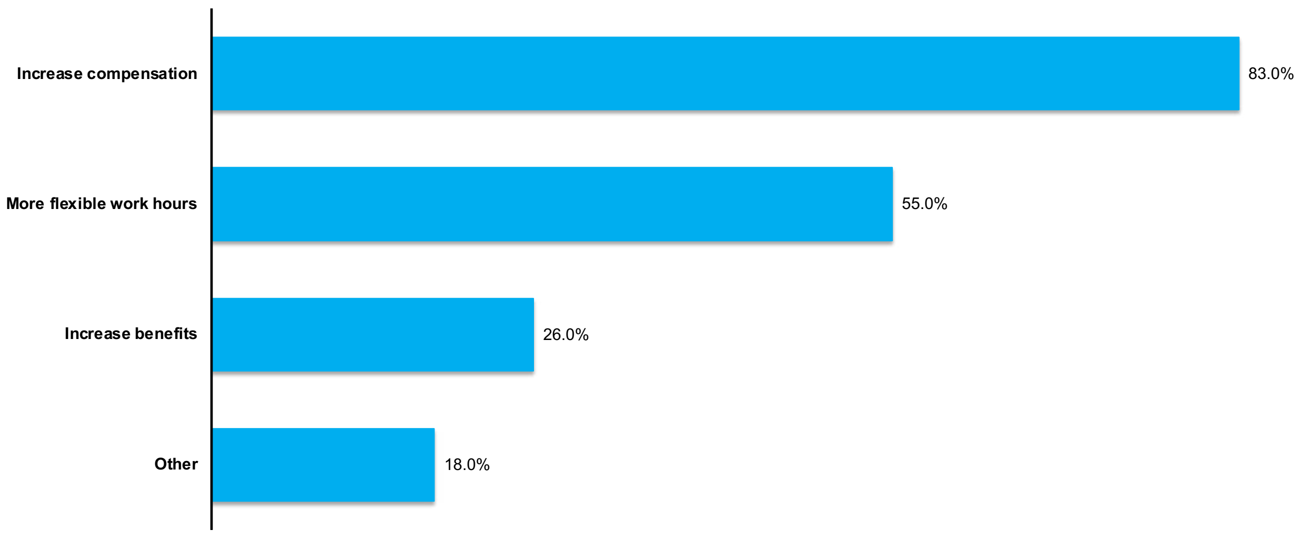
Section 2: What The Indicators Tell Us

Scrambling for Employees

What's happening in labor markets and across a broad range of operating costs is not encouraging. Specifically, 68.6% of companies surveyed are having trouble hiring. When we asked which positions are hardest to fill, production (both skilled and entry-level) was cited most often, but responses such as "All positions, from front office to the back dock and everyone in between" and "experienced anything" show that shortages extend well beyond the plant floor.

As Figure 4 shows, 83.0% of companies impacted by the shortages have increased compensation, 55.0% have expanded flex time, 26.0% have increased benefits, and 18.0% have taken actions ranging from signing and referral bonuses to promoting the cleanliness of their facilities. Yet key positions go unfilled because, as owner explains, "Compensation, benefits, flexibility, etc., do not seem to be at issue. It is more a lack of qualified applicants with experience or willingness to learn. Apparently, being an Amazon delivery driver is more exciting than working in a printshop."

Figure 4: Responding to Labor Shortages



Q. What actions are you taking to attract employees?
n=100

Also, 26.3% of our research group are having difficulty getting employees to return to work. Generous unemployment benefits, cited by 77.5%, is the top reason, followed by health concerns (42.5%) and limited childcare options (35.0%). Actions taken include "calling employees and trying to work out a benefit package that will bring them back to work," "making pay salary instead of hourly," "vaccinations and flex-time," and explaining that "it's not an option: Return to work or resign."

One comment summarizes the state of our industry's labor markets: "I have lost three employees to 'I don't want to work in this environment (COVID-19), so I will retire,' 'I can't afford to live here,' and 'I got a new job at 40% higher pay.' Plus, I've been turned down by potential hires with 'Why work when benefits from the government are generous?'"

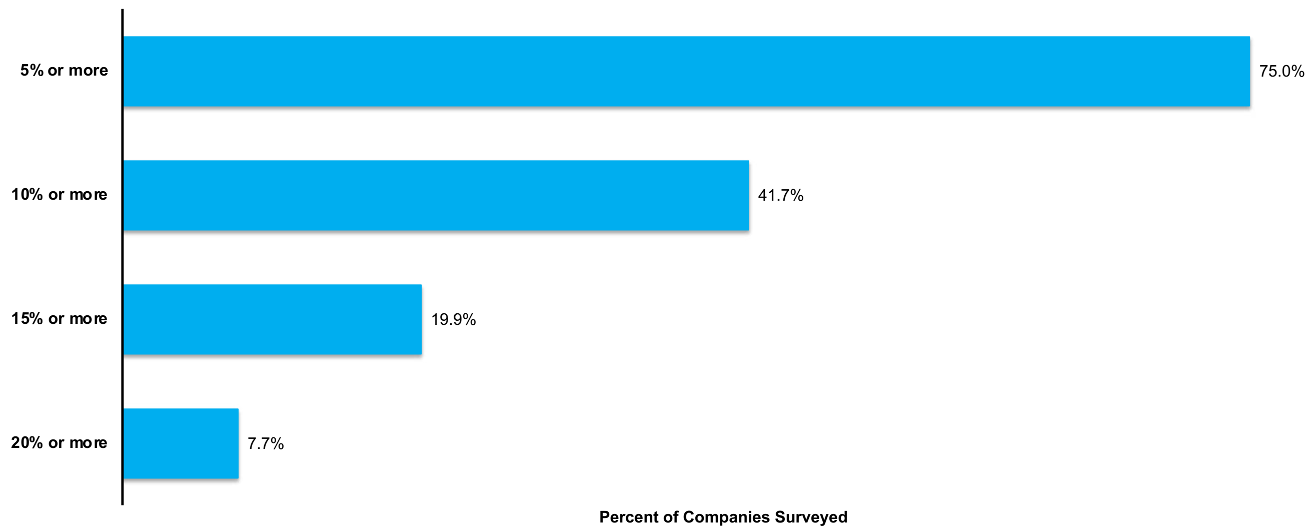
Section 2: What The Indicators Tell Us

Cost Inflation: Significant and Broad-Based

Concerning operating costs, we asked our research group four questions:

- How widespread? 91.0% report per-unit costs have increased so far this year.
- How much? Per-unit costs are up 5.0% or more for 75.0%, 10.0% or more for 41.7%, and 15.0% or more for 19.9%. The average increase: 10.0%.
- What's increasing most? Substrates, according to 85.3%, and shipping/transportation, according to 68.6%. Employee compensation was cited by 48.1%, ink/toner by 46.2%, energy by 25.0%, and a host of other inputs by 10.9%.
- What are you doing about it? Results vary dramatically from company to company, but on average, about half (51.1%) of the increase to date has been offset by raising prices, one-fifth (17.6%) offset by increasing efficiency, and one-third (31.3%) absorbed.

Figure 5: Percent Change in Per-Unit Operating Costs



Q. If your per-unit operating costs have increased so far this year, by approximately what percentage have they increased?
n=136

Representative comments:

- "Cost of goods sold are going up at rates higher than my clients can tolerate, so we've had to lower gross margin on many products to promote continued sales and activity."
- "It's hard to raise prices fast enough to cover the increases in raw materials and freight costs."
- "With many products on contract, we cannot change pricing, even though we are experiencing price increases on raw materials and labor."
- "All costs are rising, while we can implement minimal price increases. We had to increase some wages to keep people. Very competitive out there!"

Section 2: What The Indicators Tell Us

GDP Miss Raises Concern

Our industry's performance during the remainder of 2021 will depend largely on the American economy. GDP grew at a 6.5% annual rate last quarter. That is strong by historical standards, but economists were expecting a gain of 8.0% to 9.0%. Missing expectations that badly raised concern about the future pace of recovery.

A closer look suggests the concern may be overdone. First, a big reduction in business inventories contributed to the disappointing GDP number. (Inventories are included in total business investment.) Correct for the reduction — which was most likely due to supply chain disruptions rather than expectations that demand is about to tank — and GDP grows at an 8.7% rate. Second, both consumer spending, up at an 11.8% rate last quarter, and final private demand (consumer spending plus business investment in everything except inventories), up at a 9.9% rate, remain healthy. Both results suggest that the economy will continue to grow at a 6.0%+ rate for the remainder of the year, nearly triple the 2.3% average annual gain during the 10 years prior to the COVID-19 recession and the strongest single-year advance since 1984.

Three Critical Questions

Concerning next year, three questions are particularly important:

- **Is inflation really transitory?** Inflation results when the demand for goods and services persistently exceeds supply. That's happening now due to COVID-19 production/supply chain disruptions and record fiscal and monetary stimulus.

  For the inflation to be transitory, two things must happen. First, supply must quickly catch up with demand. Second, inflation must not get built into business and consumer behavior — i.e., businesses don't build inventories because prices may be higher or supplies unavailable next month, employees don't demand higher wages to keep up with the cost of living, etc.

  We don't know how quickly supply chains will mend. We do know that the consumer spending is very strong, monetary policy is still stimulative, Washington is still pouring money into the economy, and once inflation gets a foothold, it isn't that easy to dislodge. We'll have to watch carefully.

- **How will the delta variant affect the economy?** Reinstating mask mandates is not going to push the economy back into recession. Broad shutdowns would, but they aren't likely because we know much more about controlling the virus and its variants and about the true costs of shuttering the economy then we did a year ago.

- **What about policy errors?** Maybe the Fed falls behind the inflation curve and must raise interest rates too quickly. Or maybe big increases in taxes and regulations depress production. Neither is likely until the second half of 2022, at the earliest. Again, we'll have to watch carefully.

Section 2: What The Indicators Tell Us

The Outlook for Print

We expect our industry's total sales (all sources) to increase 5.5%–6.5% this year. Last year, total sales decreased 17.8%, so we will close 2021 far short of pre-COVID-19 sales. Recovering all the ground we've lost over the last 15 months is going to be long slog, but we have now taken a first step.

Results will vary dramatically from company to company, with some participating fully in recovery and others being left behind. Winning big will require:

- **Protecting margins from cost inflation and labor shortages** by making capital investments that boost productivity and speed and reduce per-unit costs; squeezing steps out of processes; automating; and investing in employee recruitment, retention, and development.

- **Maintaining urgency no matter how good business gets.** Recessions create urgency to do things more efficiently. But as recovery takes hold, the urgency fades. Maybe we can get away with that during a garden-variety recovery. But there isn't anything garden variety about this recovery or the recession that it follows.

- **Preparing for the post-COVID-19 world.** That's not when the virus and its variants have been eradicated, because that may never happen, but when we've learned to live with them. Business and consumer behavior, needs, and preferences will continue to change in the aftermath of the pandemic. The key is figuring out before the competition how they are changing, which changes are temporary and can be exploited for a while, and which are structural and must be built into long-term business plans.

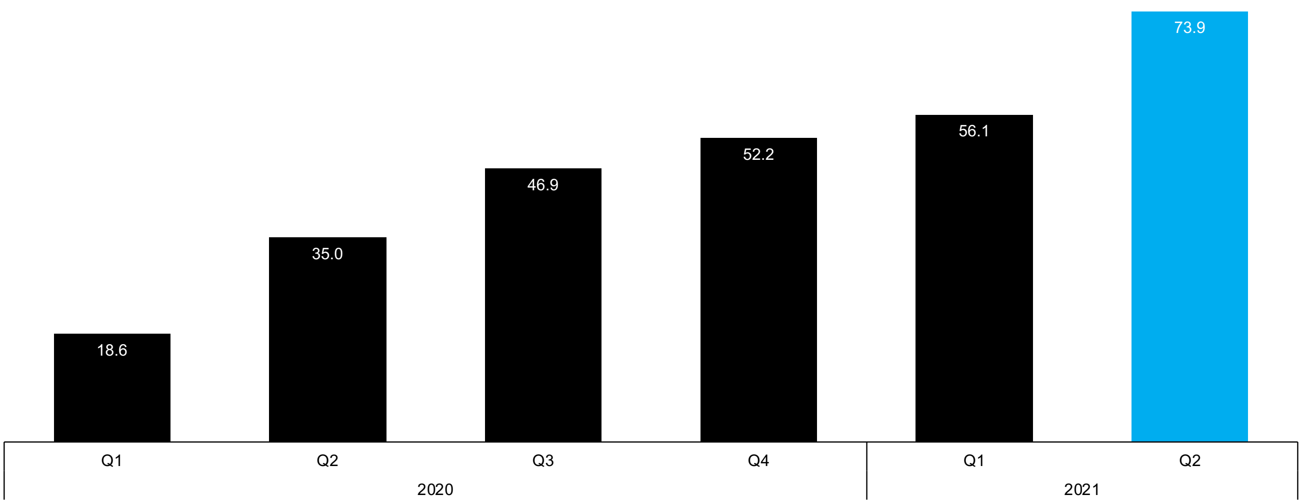
How do we do it? Start with the resources listed on page 6 of our May 2021 report.

Section 3: Index of Current and Leading Business Indicators

Index of Current Business Indicators

Our index of current business indicators is up sharply. This index provides a read on current business conditions by tracking how sales, production, prices, employment, and pre-tax profitability are trending quarter over previous quarter. A reading above 50.0 means more of the companies we survey report that business, as measured by the five components of the index, is trending higher, and a reading below 50.0 means the opposite. As the chart below shows, the index rose to 73.9 last quarter from 56.1 three months earlier and 35.0 one year earlier. Sales, trending higher for 74.3%, production, trending higher for 68.6%, and prices, trending higher for 68.6%, were responsible for the advance. For reasons we will discuss shortly, employment and pre-tax profitability showed only limited gains.

Figure 6: Index of Current Indicators



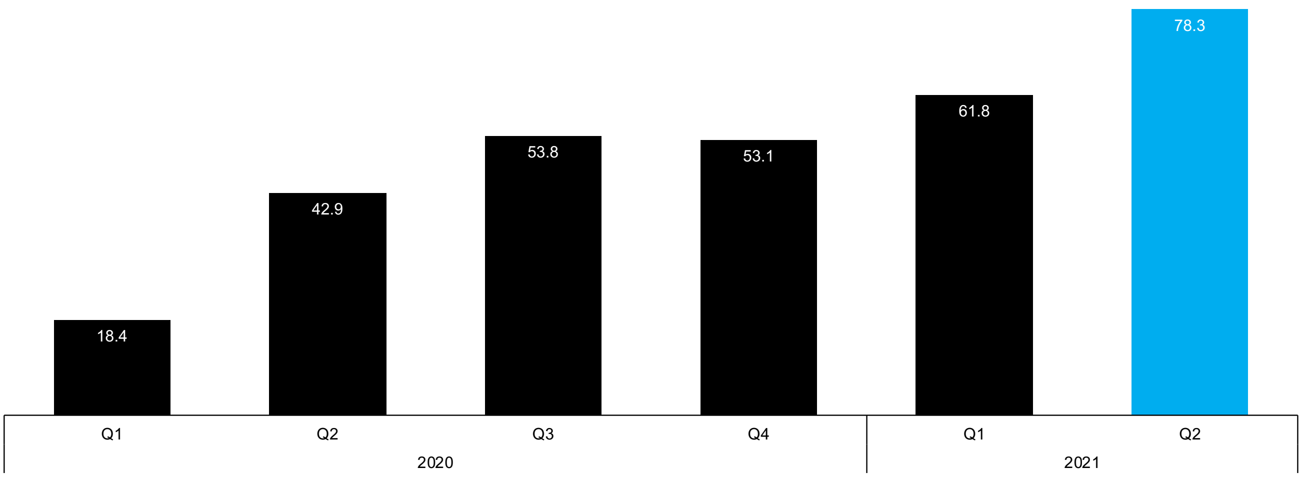
Q. How is business trending? Please indicate whether each indicator is increasing, not changing, or decreasing.
n=156

Section 3: Index of Current and Leading Business Indicators

Index of Leading Business Indicators

Our index of leading business indicators is also on the rise. This index provides a read on where business is likely heading by tracking how quote activity, work on hand, production payroll hours, and confidence are trending quarter over previous quarter. A reading above 50.0 means more of the companies we survey report that these forward-looking indicators are heading up, and a reading below 50.0 means the opposite. This index rose to 78.3 last quarter form 61.8 three months earlier and 42.9 one year earlier. All four components contributed to the advance.

Figure 7: Index of Leading Indicators



Q. How is business trending? Please indicate whether each indicator is increasing, not changing, or decreasing. n=156

Section 4: Regional Data

Geography plays a major role in business, which means that different regions may experience differences in recovery, profitability, issues faced, and many other areas. To better understand how different regions are recovering and dealing with the current economic environment, Print Business Indicator data has been broken down into four separate regions:

West:
Pacific: Alaska, California, Hawaii, Oregon, Washington
Mountain: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming

Midwest:
Plains: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota
North Central: Illinois, Indiana, Michigan, Ohio, Wisconsin

South:
South Central: Arkansas, Louisiana, Oklahoma, Texas
Southeast: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee

East:
South Mid-Atlantic: Delaware, District of Columbia, Maryland, Virginia, West Virginia
North Mid-Atlantic: New Jersey, New York, Pennsylvania
New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

This year, we will release an updated version of the Print Market Atlas, which will include all of the data seen here plus much more, broken out into much greater detail, and will also include projections for 2019 and 2020 along with estimates for 2021. In the meantime, if you would like to see more detailed information about your state, region, county, or segment, please reach out to PRINTING United Alliance economist David Wilaj at dwilaj@printing.org.

Section 4: Regional Data

West

Number of Establishments							
2014	**2015**	**2016**	**2017**	**2018**	**2019**	**Change 2019/2014**	**2020 Estimate**
5,902	5,822	5,762	5,746	5,683	5,554	-348	5,141
-2.1%	-1.4%	-1.0%	-0.3%	-1.1%	-2.3%	-5.9%	-7.4%

Source: U.S. Census Bureau County Business Patterns

Industry Trends	
Percent Reporting Increases in:	
Sales	75.9%
Price	72.4%
Profitability	63.8%
Production Payroll Hours	58.6%
Operating Costs	93.1%

Q. How is business trending? Please indicate whether each indicator is increasing, not changing, or decreasing.
Q. What has happened to your per-unit TOTAL operating costs so far this year?
n=29

- Average Price Increases: 5.5%
- Average Operating Cost Increases: 8.2%
  - 52.9% of these costs are offset by raising prices
  - 22.1% are offset by increasing production/efficiency
  - 24.8% are absorbed

Section 4: Regional Data

Employment	
During the second quarter, do you expect to:	
Add production employees	27.6%
Decrease production employees	13.8%
Keep production employment steady	58.6%

Q. During the second quarter of 2021, do you expect to add production employees, decrease production employees, keep production employment steady, or are you not sure how production employment will change?
n=29

- 69.0% are having trouble hiring
- 34.5% are finding employees hesitant to return to work

What actions are you taking to attract employees?	
Increase compensation	72.2%
Increase benefits	27.8%
Made work hours more flexible	50.0%
Other	27.8%

Q. What actions are you taking to attract employees?
n=18

Section 4: Regional Data

Midwest

Number of Establishments							
2014	**2015**	**2016**	**2017**	**2018**	**2019**	**Change 2019/2014**	**2020 Estimate**
6,797	6,670	6,611	6,533	6,339	6,187	-610	5,662
-2.5%	-1.9%	-0.9%	-1.2%	-3.0%	-2.4%	-9.0%	-8.5%

Source: U.S. Census Bureau County Business Patterns

Industry Trends	
Percent Reporting Increases in:	
Sales	72.3%
Price	83.0%
Profitability	55.3%
Production Payroll Hours	57.4%
Operating Costs	100.0%

Q. How is business trending? Please indicate whether each indicator is increasing, not changing, or decreasing.
Q. What has happened to your per-unit TOTAL operating costs so far this year?
n=47

- Average Price Increases: 6.4%
- Average Operating Cost Increases: 8.3%
    - 57.1% of these costs are offset by raising prices
    - 16.6% are offset by increasing production/efficiency
    - 26.4% are absorbed

Section 4: Regional Data

Employment	
During the second quarter, do you expect to:	
Add production employees	43.5%
Decrease production employees	2.2%
Keep production employment steady	54.3%

Q. During the second quarter of 2021, do you expect to add production employees, decrease production employees, keep production employment steady, or are you not sure how production employment will change?
n=46

- 82.6% are having trouble hiring
- 22.2% are finding employees hesitant to return to work

What actions are you taking to attract employees?	
Increase compensation	83.8%
Increase benefits	32.4%
Made work hours more flexible	56.8%
Other	18.9%

Q. What actions are you taking to attract employees?
n=37

Section 4: Regional Data

South

Number of Establishments							
2014	**2015**	**2016**	**2017**	**2018**	**2019**	**Change 2019/2014**	**2020 Estimate**
7,274	7,191	7,208	7,118	7,108	6,938	-336	6,448
-1.3%	-1.1%	0.2%	-1.2%	-0.1%	-2.4%	-4.6%	-7.1%

Source: U.S. Census Bureau County Business Patterns

Industry Trends	
Percent Reporting Increases in:	
Sales	75.0%
Price	68.8%
Profitability	28.1%
Production Payroll Hours	50.0%
Operating Costs	84.4%

Q. How is business trending? Please indicate whether each indicator is increasing, not changing, or decreasing.
Q. What has happened to your per-unit TOTAL operating costs so far this year?
n=32

- Average Price Increases: 5.3%
- Average Operating Cost Increases: 13.5%
    - 43.9% of these costs are offset by raising prices
    - 17.7% are offset by increasing production/efficiency
    - 38.0% are absorbed

Section 4: Regional Data

Employment	
During the second quarter, do you expect to:	
Add production employees	43.3%
Decrease production employees	6.7%
Keep production employment steady	50.0%

Q. During the second quarter of 2021, do you expect to add production employees, decrease production employees, keep production employment steady, or are you not sure how production employment will change?
n=30

- 56.7% are having trouble hiring
- 16.7% are finding employees hesitant to return to work

What actions are you taking to attract employees?	
Increase compensation	87.5%
Increase benefits	12.5%
Made work hours more flexible	50.0%
Other	18.8%

Q. What actions are you taking to attract employees?
n=27

Section 4: Regional Data

East

Number of Establishments							
2014	**2015**	**2016**	**2017**	**2018**	**2019**	**Change 2019/2014**	**2020 Estimate**
6,214	6,005	5,940	5,859	5,679	5,515	-699	5,032
-2.2%	-3.4%	-1.1%	-1.4%	-3.1%	-2.9%	-11.2%	-8.8%

Source: U.S. Census Bureau County Business Patterns

Industry Trends	
Percent Reporting Increases in:	
Sales	77.8%
Price	63.9%
Profitability	41.7%
Production Payroll Hours	55.6%
Operating Costs	86.1%

Q. How is business trending? Please indicate whether each indicator is increasing, not changing, or decreasing.
Q. What has happened to your per-unit TOTAL operating costs so far this year?
n=36

- Average Price Increases: 7.6%
- Average Operating Cost Increases: 9.9%
    - 50.8% of these costs are offset by raising prices
    - 14.5% are offset by increasing production/efficiency
    - 34.8% are absorbed

Section 4: Regional Data

Employment	
During the second quarter, do you expect to:	
Add production employees	44.4%
Decrease production employees	5.6%
Keep production employment steady	50.0%

Q. During the second quarter of 2021, do you expect to add production employees, decrease production employees, keep production employment steady, or are you not sure how production employment will change?
n=36

- 55.6% are having trouble hiring
- 22.2% are finding employees hesitant to return to work

What actions are you taking to attract employees?	
Increase compensation	85.0%
Increase benefits	20.0%
Made work hours more flexible	55.0%
Other	15.0%

Q. What actions are you taking to attract employees?
n=20

Section 5: What We Should Know

In this iteration of the Print Business Indicators Research, we asked respondents what we should know about the industry. These quotes provide insight that cannot be measured by quantitative metrics and give us a more in-depth pulse of the industry.

Here is what respondents had to say about the industry:

The availability and price of paper frustrated respondents throughout the second quarter:

- "It is getting harder for small printing businesses to get paper as the number of suppliers decrease and those that remain do not want small orders, placing high minimum order amounts."
- "Paper mills are squeezing independents."
- "Paper is becoming more difficult to get, and the prices continue to climb."
- "Paper shortages are a big problem."

Although the Producer Price Index (PPI) for wood pulp dropped in May, it has since risen to an all-time high once again, indicating that price increases for paper may not be done. The index is reading 49.3% higher than it was in January of 2020. The PPI for paper is also experiencing a steep climb, rising 6.7% since the beginning of 2020. As the paper production process continues to become more expensive, price increases will continue to be passed along to printers. There is no telling as to how long this will continue to last, so in the meantime, it will be important to be vigilant in the paper market. Keep an eye on prices and alternate options, and consider increasing inventories to avoid future shortages.

Printers also provided insight as to what they are dealing with in terms of employment:

- "The biggest issue the industry faces is older workers starting to retire and the younger workers don't have the experience and are hard to train."
- "[Our] wages up 10-30%; pre-pandemic paying $17 [an hour], now paying $20 an hour."
- "We are working with as many hiring agencies as we can find and posting to multiple sites. We also increased starting compensation slightly."

Of course, one of the most talked-about issues is the labor shortages being faced across the industry. Printers must not only compete with others in terms of their product, but they are now in a fierce battle over being an employer of choice. This is not just within print, either. Workers are finding lucrative opportunities in other industries and pursuing the option that is best for them. The number of employees in the commercial print industry (NAICS 323) has decreased by 11.1% since January 2020. Although this is a significant drop, industry employment has increased since the beginning of 2021, although only by 0.8%. More information on employment trends and hiring can be found on page 9 of this report.

Section 5: What We Should Know

The number of competitors in the industry is decreasing:

- “M&A activity is high and will continue to be such.”
- “Many companies are merging or closing still.”

Company closures and mergers are nothing new for the print industry, as evidenced by the establishment numbers shown in the previous section. They may, however, be accelerated by the current recovery. Companies that survive and retain autonomy should not get content with their situation, though, as there is not equilibrium of competition. This means that there is not a certain number of companies that need to exist to keep the industry afloat. Printers are continuing to cross segment boundaries and produce products that they may not have specialized in in the past. Large companies are becoming bigger, and efficiency is increasing and making it more possible for printers to offer a wider variety of products. This means that competition will continue to grow, although there is more space in the market. To become one of these adapters, it will be important to invest, diversify, and grow carefully and strategically. Don’t make any leaps that you can’t take, and evaluate every possible option. This should lead to long-term survival in an industry where the number of competitors will continue to decrease but competition will continue to rise.

Later this year, we will be releasing the State of the Industry Report, sponsored by Konica Minolta. The report will contain in-depth interviews with print providers across the industry in order to gain insight as to how peers are dealing with recovery and its associated issues as well as helping us understand what the future of the industry looks like.

Section 6: Economic Indicators to Watch

Below are some economic indicators that the industry should keep an eye on. These can help us make educated guesses on where the industry stands and where it may be headed in the future.

Below are some economic indicators we should track, who produces them, where to find them, and what each one tells us.

GDP Implicit Price Deflator					
U.S. Bureau of Economic Analysis, bea.gov					
Where inflation is and where it is likely headed.					
Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021
1.3%	-1.7%	3.7%	1.9%	4.3%	6.1%

*Percent change from preceding period

Producer Price Indexes for Commodities, Raw Materials, Transportation, and Warehousing
U.S. Bureau of Labor Statistics, bls.gov
Another important indicator of how inflation is behaving and likely to behave.

Below are a few relevant PPI readings:

PPI: Wood Pulp					
U.S. Bureau of Labor Statistics, bls.gov					
How the price to produce wood pulp has changed					
Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021
0.9%	8.5%	9.7%	19.3%	-6.0%	8.3%

*Percent change of index from preceding month

PPI: Paper					
U.S. Bureau of Labor Statistics, bls.gov					
How the price to produce paper has changed					
Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021
0.4%	1.3%	0.7%	1.8%	1.4%	2.4%

*Percent change of index from preceding month

Section 6: Economic Indicators to Watch

PPI: Carbon Black					
U.S. Bureau of Labor Statistics, bls.gov					
How the price to produce carbon black has changed — main chemical used in printing inks					
Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021
1.1%	2.6%	3.6%	2.0%	4.1%	6.0%

*Percent change of index from preceding month

Yield on 10-Year Treasury Bond						
Board of Governors of the Federal Reserve System, federalreserve.gov						
How longer-term interest rates are trending.						
Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	June 2021	July 2021
1.11%	1.44%	1.74%	1.65%	1.58%	1.45%	1.24%

*Rate taken from last day of each month

Commercial and Industrial Loans, All Commercial Banks					
Board of Governors of the Federal Reserve System, federalreserve.gov					
Are banks converting their excess reserves into loans?					
Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021
-1.1%	0.7%	0.3%	-1.2%	-0.6%	-2.4%

*Percent change from preceding period

Section 6: Economic Indicators to Watch

Business Investment in Equipment, Software, and Structures
U.S. Bureau of Economic Analysis, bea.gov
Investment, private and public, that builds the economy's productive capacity is the foundation of noninflationary economic growth and rising living standards.

Productivity of All Nonfarm Businesses and of Manufacturing Businesses					
U.S. Bureau of Labor Statistics, bls.gov					
Are the investments we're making boosting productivity?					
Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021
-1.8%	11.2%	4.6%	-3.4%	4.3%	2.3%

*Percent change of index from previous quarter

Below is a relevant productivity measure for the print industry:

Average Weekly Hours Worked: NAICS Printing and Related Support Activities					
U.S. Bureau of Labor Statistics, bls.gov					
The average weekly hours worked of all employees in the industry					
Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021
37.0	36.8	37.2	37.3	37.5	37.7

*Hours worked each month

Index of Unit Labor Costs				
U.S. Bureau of Labor Statistics, bls.gov				
The relationship between employment costs and productivity. Compensation and productivity rising together, boosting economic output and the income to purchase the output, is the ideal. Compensation consistently outpacing productivity is inflationary. Productivity consistently outpacing compensation is deflationary — you don't grow an economy by impoverishing people.				
Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021
Nonfarm Business Sector				
2.4%	2.8%	-2.5%	3.3%	0.4%
Manufacturing Sector				
1.0%	9.6%	-7.7%	1.3%	2.6%

*Percent change of index from previous quarter

Section 6: Economic Indicators to Watch

Number of Employees in the Industry: NAICS 323 Printing and Related Support Activities					
U.S. Bureau of Labor Statistics, bls.gov					
The total number of employees in the industry					
Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021
-0.8%	-0.4%	1.4%	-0.5%	0.7%	-0.4%

*Percent change from the preceding month

Manufacturers' New Orders: Durable Goods					
U.S. Census Bureau, census.gov					
The number of new orders for durable goods. A leading indicator of economic growth					
Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021
2.4%	1.3%	1.3%	-0.7%	3.2%	0.8%

*Percent change from the preceding month

United States Unemployment Rate					
U.S. Bureau of Labor Statistics, bls.gov					
The number of unemployed as a percentage of the labor force					
Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021
6.3%	6.2%	6.0%	6.1%	5.8%	5.9%

*Unemployment rate show for each month

Below is data to keep an eye on from the Wall Street Journal Economic Forecasting Survey. Each quarter, 60 analysts and economists from across the country forecast various economic indicators and other data.

GDP (Quarterly, Annualized Growth Rate) Estimates				
The Wall Street Journal Economic Forecasting Survey, wsj.com				
Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022
9.11%	7.01%	5.44%	3.83%	3.25%

*Forecasted GDP growth for each quarter

GDP (Annual, Year-over-Year) Estimates		
The Wall Street Journal Economic Forecasting Survey, wsj.com		
Full Year 2021	Full Year 2022	Full Year 2023
6.89%	3.24%	2.30%

*Forecasted GDP growth for each year

Section 7: Appendix – Capital Investment Plans

Commercial Printers

Do you plan to make capital investments over the next 12 months?	
Yes	54.3%
No	19.6%
Not Sure	26.1%

Q. Do you plan to make capital investments over the next 12 months?
n=92

Which investments are you planning?	
All inkjet	61.9%
Bindery/finishing	59.5%
Digital infrastructure	45.2%
Inkjet: Commercial	35.7%
Workflow software	31.0%
Mailing capabilities	28.6%
Prepress/premedia	26.2%
E-commerce solutions	21.4%
Dry toner	21.4%
Offset: Sheetfed	19.0%
Print enhancement technology	14.3%
Database creation, management, analysis capabilities	11.9%
Inkjet: Wide format	11.9%
MIS	9.5%
DAM	7.1%
Fulfillment capabilities	7.1%
Inkjet: Custom solutions	4.8%
Inkjet: Dye-sublimation	4.8%
Offset: Web	4.8%
Other	4.8%
Wet toner	2.4%
Inkjet: Cylinder	2.4%
Inkjet: Narrow format	2.4%
Screen: Cylinder	2.4%
Pad Printing	2.4%
Flexographic printing	2.4%

*The following investments all received 0% of responses: Inkjet: Direct to Garment, Screen, Screen: Rotary, Laser Etch/Engrave, Dynamic Signage, Embroidery, Gravure, Subtractive Conversion, 3D Printing

Q. Which investments are you planning?
n=42

Section 7: Appendix – Capital Investment Plans

Graphic and Sign Producers

Do you plan to make capital investments over the next 12 months?	
Yes	57.7%
No	11.5%
Not Sure	30.8%

Q. Do you plan to make capital investments over the next 12 months?
n=26

Which investments are you planning?	
All inkjet	73.3%
Inkjet: Wide format	46.7%
Prepress/premedia	40.0%
Workflow software	40.0%
E-commerce solutions	40.0%
MIS	40.0%
Digital infrastructure	33.3%
Other	33.3%
Inkjet: Dye-sublimation	26.7%
Bindery/finishing	20.0%
DAM	13.3%
3D Printing	13.3%
Database creation, management, analysis capabilities	6.7%
Screen	6.7%
Dynamic signage	6.7%
Flexographic printing	6.7%
Print enhancement technology	6.7%
Fulfillment capabilities	6.7%

*The following investments all received 0% of responses: Dry Toner, Wet Toner, Inkjet: Commercial, Inkjet: Custom Solutions, Inkjet: Cylinder, Inkjet: Direct to Garment, Inkjet: Narrow Format, Offset: Sheetfed, Offset: Web, Screen: Cylinder, Screen: Rotary, Laser Etch/Engrave, Pad Printing, Embroidery, Gravure, Subtractive Conversion, Mailing Capabilities

Q. Which investments are you planning?
n=15

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WHO WE ARE

PRINTING United Alliance is the new entity borne of the merger between Specialty Graphic Imaging Association (SGIA) and Printing Industries of America (PIA). In a milestone in the printing industry, SGIA and PIA officially combined in 2020 to create the largest, most comprehensive member-based printing and graphic arts association in the United States.

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