



## THE STATE OF THE INDUSTRY



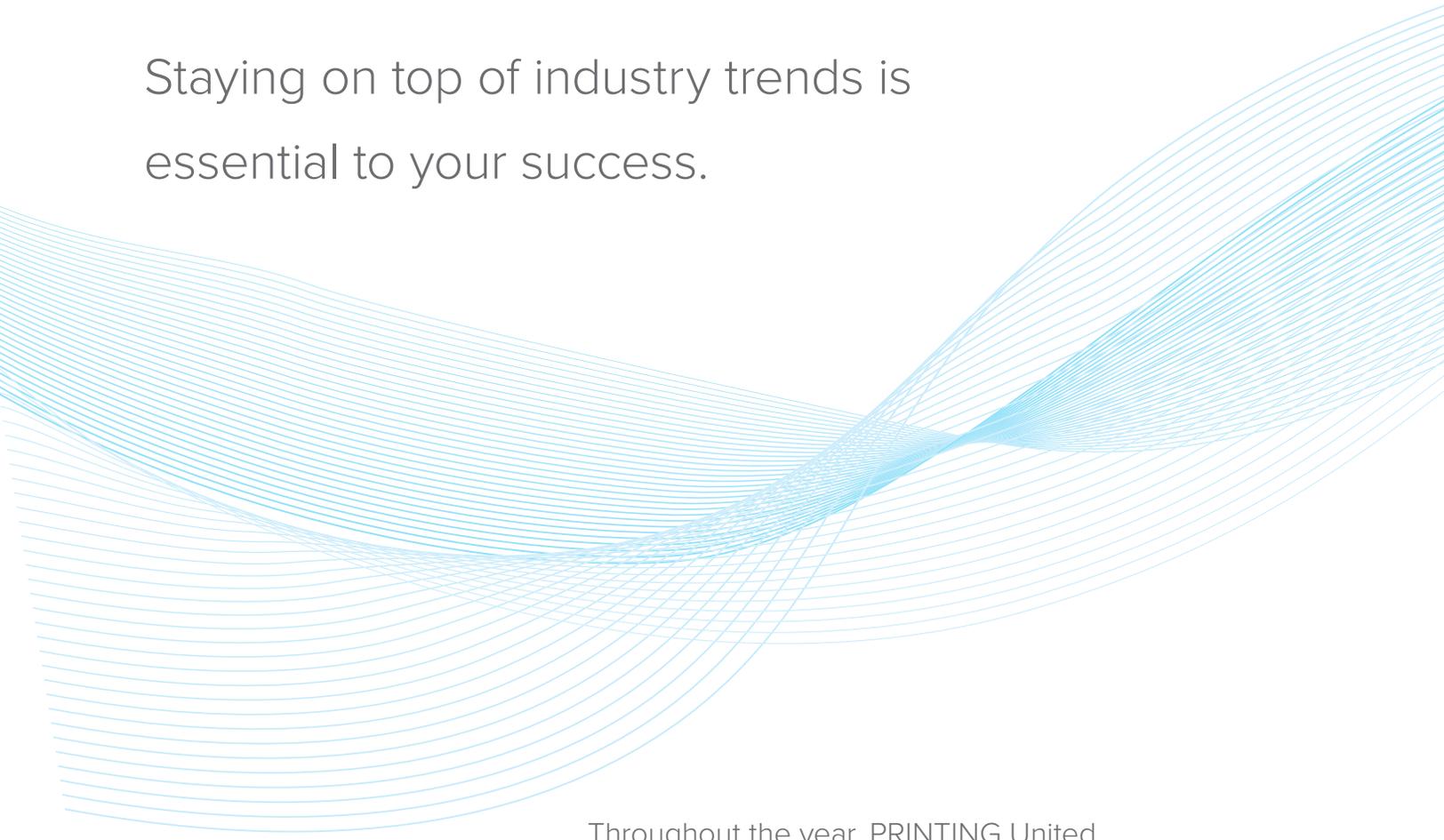
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Throughout the year, PRINTING United Alliance's research team creates top-notch reports for the industry and works with consultancies to conduct commissioned research.

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](mailto:ResearchTeam@printing.org).

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Konica Minolta Business Solutions U.S.A., Inc. is committed to the success of its customers, the industry, and the associations that support it. It is our honor to support PRINTING United Alliance’s industry-leading economic reports. By providing invaluable insights for industry leaders regarding critical economic conditions, Konica Minolta is proud to continue to be a trusted advisor and an indispensable partner to help businesses prosper.

Konica Minolta Business Solutions U.S.A., Inc., a leader in industrial and commercial printing and packaging solutions, ignites print possibilities. It delivers the latest innovations in printing, applications, and expertise through its comprehensive portfolio of production print offerings that provide businesses more creative avenues, agility, and versatility to confidently capitalize on market opportunities. Together, the future of the print world can be transformed for the better.

# The State of the Industry Series

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The PRINTING United Alliance/NAPCO Research State of the Industry Series provides timely, accurate analysis of the printing industry's performance and prospects. The series includes a *State of the Industry Report*, published in October, and *SOI Updates*, published in February, May, and August.

An industrywide survey is an important part of our methodology. Participants include commercial printers, graphic and sign producers, apparel decorators, functional printers, and package printers/converters. (A profile of participants in the survey supporting this report is on page 6.)

Indicators tracked include sales, employment, prices, quote activity, work on hand, and confidence. Each survey also investigates critical issues such as what concerns printers most and how they are addressing those concerns, their capital investment plans and objectives, and the markets they believe have the most growth potential.

We also maintain a set of business indicators ranging from measures of general economic activity, such as GDP, to industry-specific measures, such as hours worked by printing industry production personnel. These indicators provide an independent check on the results of our surveys.

"Must-dos" show how to make what's happening and what's ahead an opportunity rather than a threat. The result is research PRINTING United Alliance members can count on and act on.

For information about the State of the Industry Series, please contact David Wilaj, economist, PRINTING United Alliance, [dwilaj@printing.org](mailto:dwilaj@printing.org), or Andy Paparozzi, chief economist, PRINTING United Alliance, [apaparozzi@printing.org](mailto:apaparozzi@printing.org).

# The State of the Industry Panel

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The State of the Industry Panel consists of more than 300 companies from across the printing industry who regularly participate in our surveys. A large pool of consistent participants allows us to provide more accurate and reliable analysis by increasing the comparability of the data from survey to survey and reducing the nonresponse bias that is often a major source of error in survey research.

We build relationships with panel members, establishing trust and confidence that encourage frank discussion of critical business issues, strategies, and tactics. We learn what the numbers really mean, as well as what printing companies are trying, what's working, what isn't working, and why. That helps us create more insightful reports and develop future surveys.

In addition to all reports in the State of the Industry Series, panel members receive proprietary reports on critical printing industry issues and trends and how to prepare for sustained success in an industry where the gamut of opportunity is expanding but the margin for error is shrinking.

To join the State of the Industry Panel, please [click here](http://www.research.net/r/CV19PRUP3) (www.research.net/r/CV19PRUP3).

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](mailto:dwilaj@printing.org), or Andy Paparozzi, chief economist, PRINTING United Alliance, [apaparozzi@printing.org](mailto:apaparozzi@printing.org).

# Executive Summary

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More than 250 printing companies from across the United States and Canada participated in the first annual PRINTING United Alliance/NAPCO Research State of the Industry Survey. Topics included how first-half 2021 sales compared with year-earlier levels; expectations for full-year 2021 and full-year 2022 sales; how confidence, quote activity, and work on hand are trending; and which capital investments printers would most like to make next year and why.

## Key Findings

- State of the Industry (SOI) participants expect their third-quarter sales to be up 13.8%, on average, from year-earlier levels. That follows gains averaging 7.9% during the first half of 2021 and brings expected growth for the first three quarters of this year to 9.9%.
- The gains are inflated by the pass-through of rising operating costs and by comparison with deeply depressed year-earlier levels. Nevertheless, they mark another step in the printing industry's recovery from the COVID-19 recession.
- Quote activity and work on hand also point to continued recovery. Quote activity is increasing for 68.4% of companies surveyed and work on hand for 66.4%. One year ago, those numbers were 42.6% and 33.2%, respectively.
- Confidence has moderated, with fewer SOI participants expecting business to improve during the month ahead – 54.7%, down from 64.3% one quarter earlier – and more expecting business to stay at current levels – 30.3%, up from 24.9% last spring.
- SOI participants expect material shortages and labor shortages to continue disrupting production and fueling cost inflation well into 2022. Nearly 48.0% expect supply chain disruptions/material shortages, 40.5% expect labor shortages, and 88.2% expect one or both to be among their biggest challenges next year.
- Increasing efficiency, cited by 78.2% of companies surveyed, is the top capital investment priority for 2022. Increasing production speed/decreasing turn times, cited by 45.7%, ranked second.
- PRINTING United Alliance expects the printing industry to continue growing in 2022 but at a rate that slows noticeably after midyear. Our preliminary forecast: Printing industry sales increase 5.2%–6.2% in 2022, by 8.0%–9.0% during the first half and by 2.5%–3.5% during the second half.
- Some companies will far surpass industry results and others will fall far short. The difference will be who best protects themselves from ongoing supply-side disruptions and cost inflation and who is best prepared for the post-COVID-19 world.
- The number of printing establishments in the United States fell an average of 1.6% per year between 2014 and 2019, and by 7.6% in total. PRINTING United Alliance estimates that our industry's establishment count fell by another 7.9% in 2020. The decline in the number of establishments extends across every region in the U.S.
- Prepare for the post-COVID-19 world by maximizing virtual selling capabilities, becoming a data-centric organization, and digitally transforming processes. Overcome persistent labor shortages by increasing employee engagement and crafting an effective employee value proposition.

# Participant Profile

Number surveyed: 252

## Company Size: 2020 Sales (all sources)

2020 Sales	Percent
\$500,000 or less	12.4%
\$500,000 to \$1,000,000	9.6%
\$1 million+ to \$3 million	24.3%
\$3 million+ to \$5 million	12.4%
\$5 million+ to \$10 million	14.3%
\$10 million+ to \$20 million	10.4%
\$20 million+ to \$40 million	9.6%
\$40 million+ to \$60 million	2.8%
\$60 million+ to \$100 million	1.6%
\$100 million+	2.8%

## Primary Printing Segment

Segment	Percent
Commercial printing	57.5%
Graphic and sign production	21.0%
Apparel decoration	9.5%
Functional printing	6.7%
Package printing/converting	4.4%

# Participant Profile

## Location

Location*	Percent
<b>United States</b>	<b>94.0%</b>
<b>West</b>	<b>16.2%</b>
Pacific	7.9%
Mountain	8.3%
<b>Midwest</b>	<b>36.8%</b>
Plains	11.1%
North Central	25.7%
<b>South</b>	<b>20.3%</b>
South Central	5.2%
Southeastern	15.1%
<b>East</b>	<b>20.7%</b>
South Mid-Atlantic	3.6%
North Mid-Atlantic	12.3%
New England	4.8%
<b>Canada</b>	<b>6.0%</b>

\* **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.

# Current and Leading Printing Business Indexes

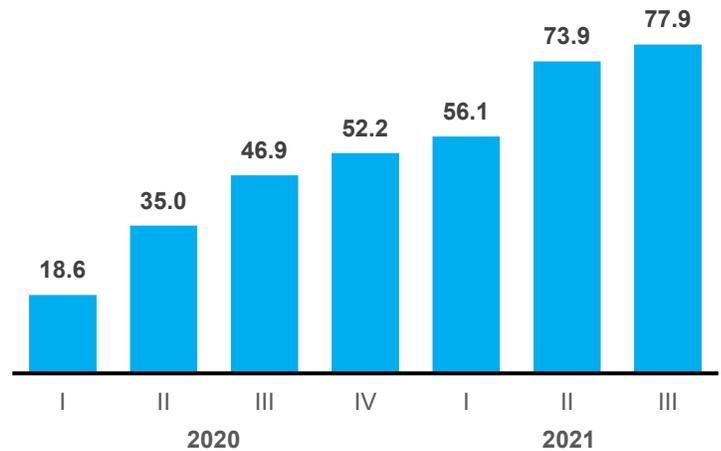
To provide a quick read on how business is currently trending and where it is likely headed, PRINTING United Alliance created an index of current printing industry business indicators and an index of leading printing industry business indicators.

## Index of Current Business Indicators

Our current index tracks 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 heading higher, and a reading below 50.0 means the opposite.

The index rose again last quarter, to 77.9 from 73.9 three months earlier. One year ago, the index was 46.9. Sales, rising for 78.9%, production, rising for 77.3%, and prices, rising for 68.6%, contributed most to the advance. For the first time since the start of the COVID-19 crisis, the majority (51.2%) of companies surveyed report pre-tax profitability is rising.

Index of Current Business Indicators

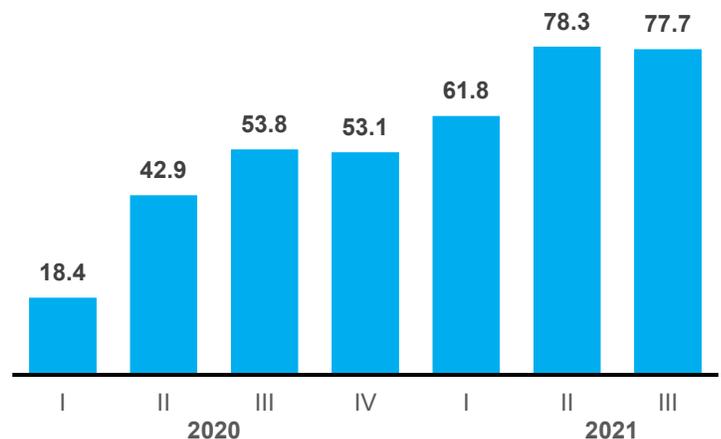


## Index of Leading Business Indicators

Our leading index tracks 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.

The index slipped last quarter, to 77.7 from 78.3, but remains well above last year's 53.8. There was little change in the percent of companies reporting rising work on hand, 66.4% compared with 66.9% three months earlier, or rising production payroll hours, 56.3% compared with 56.1% last quarter. Reports of rising quote activity fell modestly, to 68.4% from 70.1%. Confidence was the big mover: A significant percentage of our research group have changed their expectations for business conditions over the month ahead from "improve" to "stay the same." (See page 10.)

Index of Leading Business Indicators



## Section 1: Where We Are

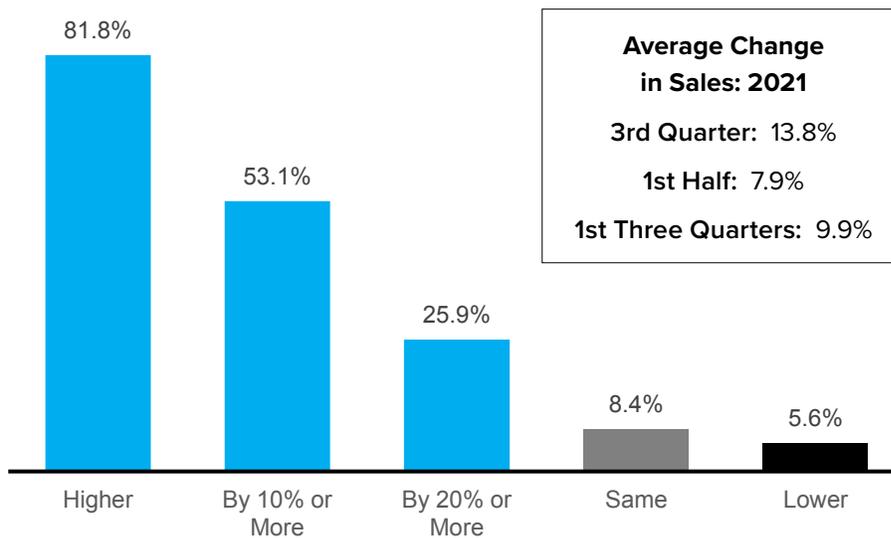
Recovery continues for the printing industry. But so do material shortages and labor shortages that are disrupting production and fueling cost inflation. Companies across our industry are building inventories of key materials, working with clients to extend lead times, and making tough decisions about how much to raise prices. Expect the shortages and disruptions to continue well into 2022.

### Upturn Continues in Third Quarter

In late August, we asked participants in our State of the Industry (SOI) Survey how they expect their third-quarter 2021 sales (all sources) to compare with year-earlier levels. As Figure 1 shows, 81.8% expect sales to be greater than a year ago — 53.1% by at least 10.0% and 25.9% by least 20.0% — 8.4% expect no change, and 5.6% expect decline. (The remaining 4.2% are not sure how this year will compare with last year.) The average expected change is 13.8%, bringing expected growth for the first three quarters of this year to 9.9%.

The gains are inflated by the pass-through of rising operating costs — “At least half of our sales growth is based on price increases driven by raw material price increases” — and by comparison with levels deeply depressed by the COVID-19 crisis. They also leave us far short of pre-pandemic sales: “Although sales are increasing over the last quarter, we are still 23% down from 2019.” Nevertheless, they show the recovery that began for our industry last spring continued through summer.

**Figure 1: How Third-Quarter 2021 Sales Are Expected to Compare With Year-Earlier Levels**



Q. How did your sales (all sources) for the third calendar quarter of 2021 compare with year-earlier levels?

n=145

So do quote activity and work on hand. As Figure 2 shows, quote activity is increasing for 68.4% of our survey group and decreasing for 6.1%. A year ago, those numbers were 42.6% and 30.2%, respectively. For work on hand, 66.4% report an increase, up from 33.2%, and 7.3% report a decrease, down from 38.3%.

## Section 1: Where We Are

**Figure 2: Quote Activity and Work on Hand**

Indicator	Current Trend	3rd Qtr. 2021	3rd Qtr. 2020
Quote Activity	<b>Increasing</b>	<b>68.4%</b>	<b>42.6%</b>
	Staying the Same	25.5%	27.2%
	Decreasing	6.1%	30.2%
Work on Hand	<b>Increasing</b>	<b>66.4%</b>	<b>33.2%</b>
	Staying the Same	26.3%	28.5%
	Decreasing	7.3%	38.3%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing.  
n=250

There's also good news from the United States Bureau of Labor Statistics. Between April and August, our industry added 66,700 employees and 67,400 production/nonsupervisory employees, after losing 329,400 of the former and 213,100 of the latter a year earlier. Over the same five months, the workweek of production/nonsupervisory personnel averaged 39.3 hours, a 7.7% increase from 36.5 hours a year earlier. (See Figure 3.)

**Figure 3: Employment and Hours Worked**

Change in Printing Industry Employment						
Year	Apr	May	Jun	Jul	Aug	Total Change
2021	30,600	12,900	7,700	5,700	9,800	66,700
2020	-84,400	-63,600	-60,300	-59,200	-61,900	-329,400

Change in Printing Industry Production/Nonsupervisory Employment						
Year	Apr	May	Jun	Jul	Aug	Total Change
2021	23,400	13,500	9,400	8,700	12,400	67,400
2020	-57,500	-42,900	-38,200	-35,300	-39,200	-213,000

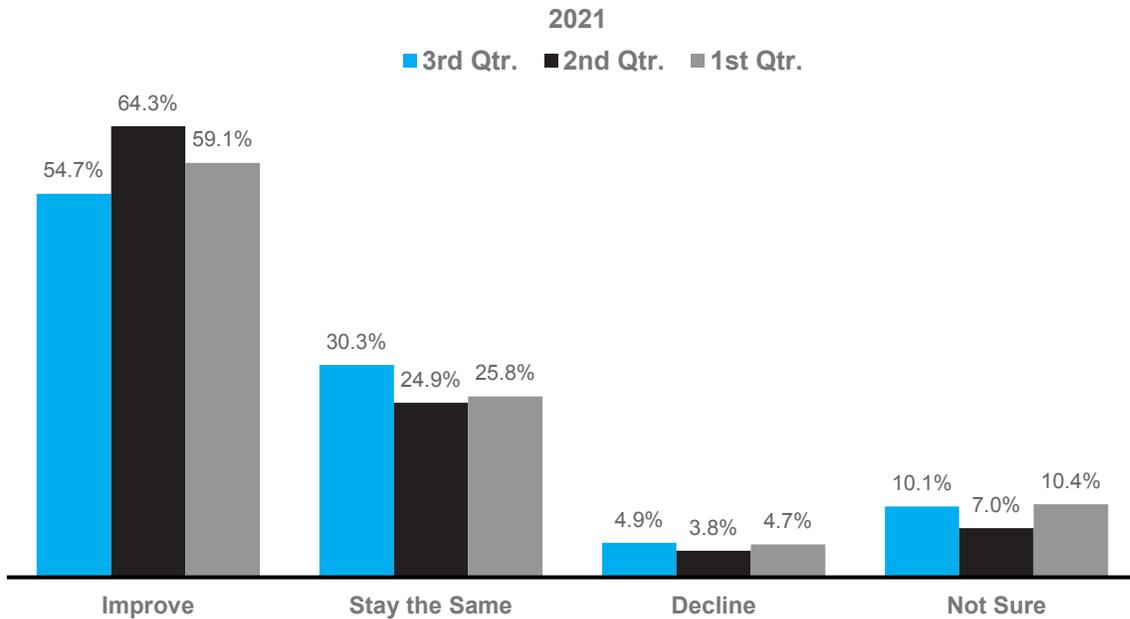
Average Weekly Hours: Printing Industry Production/Nonsupervisory Employees						
Year	Apr	May	Jun	Jul	Aug	Monthly Average
2021	39.0	39.4	39.6	39.3	39.1	39.3
2020	34.4	35.9	36.5	37.3	38.3	36.5

Source: United States Bureau of Labor Statistics, [www.bls.gov](http://www.bls.gov).

# Section 1: Where We Are

We asked SOI participants how they expect business conditions during the month ahead to compare with current conditions. As Figure 4 shows, they are not as confident as they were earlier in the year: 54.7% now expect business to improve, down from 64.3% one quarter earlier and 59.1% two quarters earlier, while 30.3% expect business to stay at as is, up from 24.9% and 25.8%. Uncertainty about the availability of essential materials and how much the delta variant will retard the recovery of in-person events is responsible for the moderating expectations. It is encouraging that just 4.9% of companies surveyed expect business to decline.

**Figure 4: Confidence**



Q. In relation to current conditions, do you expect business conditions for your company to improve, stay the same, or decline during the month ahead?  
n=250

# Section 1: Where We Are

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## Supply-Side Trouble

The most telling results of our survey concerned supply-side conditions. SOI participants talked about shortages of “almost every consumable,” as well as “parts and equipment” and of how the shortages are compounded by delivery delays: “Trucklines are worse now than anytime I can remember — you can get no commitment on a delivery time at all!!!” and “Everything seems to be lagging due to shortages of some kind or freight holding things from being delivered.”

They also discussed the consequences of the shortages and how they are responding:

- “We have ordered more paper, inks, and coatings than normal in case they become harder to get. If we don’t have the paper, we are special ordering paper and that is causing delays in delivery and additional overtime to meet expectations.”
- “We have taken larger inventory positions on key materials and are working closely with our supplier partners to understand inventory levels and lead times.”
- “We have seen increased material lead times on nearly all stocks. We are advising customers to plan further out in terms of project dates to ensure supply.”
- “We are making substitutions or reaching out to new vendors to find material. Two weeks ago, I couldn’t get 11x17 20# bond. Are you kidding me?”
- “I cannot get supplies sometimes for lack of production in the U.S. and sometimes for lack of imports or delays. My minimum orders for supplies have increased, and many companies have fewer delivery days during the week or do not have deliveries available anymore. I have to pick up my own supplies, which is additional cost, like gas, time, maintenance, etc.”
- “Both paper companies we use have put us on allocation. They look at what our average month was last year, and we cannot purchase beyond that. And finding some papers and substrates on the sign side of the business sometimes takes four or five calls to different vendors.”
- “Customers, suppliers, and employees are uncertain of what is going on and what will happen in the future. We are meeting face to face with suppliers to secure materials and making commitments to suppliers rather than just email an order and hope. We see price increases and supply chain problems with nearly all materials.”

# Section 1: Where We Are

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## No Quick Fixes

There is no quick fix for any of this. The events of the last 18 months are without precedent. The American and world economies were shut down and extraordinarily expansionary monetary and fiscal policies pursued to stimulate demand and prevent recession from becoming depression. We are now learning that multitrillion-dollar economies are not easy to reopen and relearning that when demand continually runs ahead of supply, persistent — not transitory — inflation results. One member of our research panel describes supply-side realities:

**“We are having a really rough time with coated papers, lamination, plastic coils, some envelopes, etc. The worst would have to be apparel: The T-shirt manufacturers have an 18-month ramp-up that they are only halfway through. Additionally, ball caps are almost nonexistent right now. This may normalize by the first quarter of next year if the sewing factories are not required to quarantine again. This is a global problem. For instance, T-shirt manufacturers grow the cotton in the southern United States, dye and yarn it in South Carolina and Georgia, ship it to Honduras and the Dominican Republic to weave into cloth, and then send it to San Antonio to cut and sew into shirts. All it takes is one point to come down and the whole system idles.”**

Another panel member worries that the disruptions will have long-term consequences for print: “For the first time in a very long time, conversations with clients include topics like paper substitutes, availability, and delayed production due to lack of paper. *I believe those types of conversations are going to present greater problems for the future of print than price.*” And another concisely states the consensus: “We are going under the presumption that supplies will be more scarce, longer to ship, and more expensive from now on. There is just too much disruption in the labor market and supply lines.”

## Labor-Market Realities

Concerning labor markets, here are the highlights from our previous report:

- 68.6% of companies surveyed are having trouble hiring. Production positions (both skilled and unskilled) are most difficult to fill, but responses such as “everything from front office to the back dock and everyone in between” show shortages extend well beyond the plant floor.
- 83.0% 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 positions go unfilled.
- Causes such as generous unemployment benefits, health concerns, and a lack of childcare options will ease. But we will still be hampered by an old-economy image that makes it difficult to attract young talent. And where we once competed only with other printers for personnel, we are now competing economy-wide for a range of critical skills, including database analytics, IT, logistics, marketing, consultative selling, and business development. That competition is not going to ease.

# Section 1: Where We Are

## Three Options

Ongoing disruptions in material and labor markets and the cost inflation they create leave us with essentially three options: Pass the increases on as higher prices, offset the increases with efficiency gains, or absorb them.

Last quarter we asked our research panel how they have been handling the inflation. Their responses, summarized in Figure 5, show that so far:

- Clients have been generally accepting of price increases. On average, 50.9% of the increase in operating costs has been passed along as higher prices, with 59.3% of companies surveyed passing along at least half of the increase and 36.3% passing along at least three-quarters.
- Little of the cost inflation has been offset by increasing efficiency. 65.5% have offset less than one-quarter and just 10.6% have offset at least half. The average offset: 17.8%.
- A significant percentage of the cost inflation has been absorbed: more than 31.0%, on average, with 52.2% of our research group absorbing at least one-quarter of the increase.

**Figure 5: Responding to Cost Inflation**

Response	Average	Percent of companies surveyed responding:			
		Less than 25%	25% to 49%	50% to 74%	75% or More
Offset by Raising Prices	50.9%	23.9%	16.8%	23.0%	36.3%
Offset by Increasing Efficiency	17.8%	65.5%	23.9%	8.8%	1.8%
Absorbed	31.3%	47.8%	21.2%	19.5%	11.5%

Q. Approximately what percent of the increase in your TOTAL operating costs so far this year have you offset by raising prices, offset by increasing efficiency/productivity, or absorbed?

n=113

# Section 1: Where We Are

## Where Companies Would Most Like to Invest and Why

We can't count on clients continuing to accept price increases, and of course, our ability to absorb increases is limited. The long-term answer is consistent efficiency gains supported by prudent capital investment.

How are SOI participants thinking about capital investment in the aftermath of a recession unlike any other? To find out, we asked which capital investments they'd most like to make over the next 12 months and their investment objectives. (We asked about desired investments rather than planned investments because there is still so much uncertainty.)

Our research panel identified nearly 50 desired investments. Figure 6 lists the investments cited by at least 20.0%, first for all companies surveyed and then by primary printing segment. Note the broad-based interest in workflow software, e-commerce, and digital infrastructure.

Figure 7 summarizes investment objectives. Note that increasing efficiency is the most frequently cited objective by a wide margin across all five segments.

One participant in our research summarized his take on capital investment this way: "It's the best time to invest in your company — 100% depreciation, low interest rates, government money, and a paradigm shift in technology." Moving investments from desired to realized will be essential to growing profitably during the recovery underway. How many in our industry are? Future reports will track the answer closely.

**Figure 6: Desired Capital Investments**

All Companies Surveyed (n=243)	
Investment	Citing
Bindery/Finishing	31.3%
Workflow Software	28.4%
E-commerce	27.2%
Inkjet, Commercial	23.5%
Digital Infrastructure	22.6%

Apparel Decoration (n=23)	
Investment	Citing
E-commerce	39.1%
Workflow Software	34.8%
Inkjet, Direct-to-Garment	34.8%
Management Information Systems	21.7%
Screen Printing	21.7%
Digital Infrastructure	21.7%

## Section 1: Where We Are

<b>Commercial Printing (n=141)</b>	
<b>Investment</b>	<b>Citing</b>
Bindery/Finishing	45.4%
Inkjet, Commercial	34.8%
E-commerce	29.1%
Mailing	28.4%
Workflow Software	27.0%
Digital Infrastructure	22.7%

<b>Functional Printing (n=16)</b>	
<b>Investment</b>	<b>Citing</b>
Screen Printing	37.5%
Digital Infrastructure	25.0%
Screen, Rotary	25.0%
Flexography	25.0%
Print Enhancement	25.0%

<b>Graphic and Sign Production (n=51)</b>	
<b>Investment</b>	<b>Citing</b>
Workflow Software	37.3%
Inkjet, Wide Format	37.3%
Management Information Systems	29.4%
E-commerce	27.5%
Digital Infrastructure	25.5%

<b>Package Printing/Converting (n=10)</b>	
<b>Investment</b>	<b>Citing</b>
Offset, Sheetfed	50.0%
Flexography	50.0%
Prepress/Premedia	30.0%
Inkjet, Narrow Format	30.0%
Inkjet, Commercial	20.0%
Bindery/Finishing	20.0%

# Section 1: Where We Are

**Figure 7: Capital Investment Objectives**

All Companies Surveyed (n=234)	
Investment Objective	Citing
Increase productivity/efficiency	78.2%
Increase production speed/decrease turn times	50.4%
Serve an existing market more effectively/efficiently	40.6%
Replace/upgrade aging equipment/software systems	45.7%
Expansion into a new market	41.9%
Automate operations	41.5%
Our business is growing and we need to expand capacity	28.2%
To compete more effectively on price	17.9%
Other	3.4%

Apparel Decoration (n=23)	
Investment Objective	Citing
Increase productivity/efficiency	69.6%
Increase production speed/decrease turn times	56.5%
Replace/upgrade aging equipment/software systems	52.2%
Automate operations	39.1%
Expansion into a new market	34.8%
Our business is growing and we need to expand capacity	30.4%
Serve an existing market more effectively/efficiently	26.1%
To compete more effectively on price	21.7%
Other	0.0%

Commercial Printing (n=134)	
Investment Objective	Citing
Increase productivity/efficiency	79.9%
Replace/upgrade aging equipment/software systems	48.5%
Increase production speed/decrease turn times	44.8%
Expansion into a new market	43.3%
Serve an existing market more effectively/efficiently	41.8%
Automate operations	41.8%
Our business is growing and we need to expand capacity	22.4%
To compete more effectively on price	17.9%
Other	3.7%

## Section 1: Where We Are

<b>Functional Printing (n=16)</b>	
<b>Investment Objective</b>	<b>Citing</b>
Increase productivity/efficiency	75.0%
Increase production speed/decrease turn times	62.5%
Our business is growing and we need to expand capacity	62.5%
Expansion into a new market	56.3%
Replace/upgrade aging equipment/software systems	50.0%
Serve an existing market more effectively/efficiently	43.8%
Automate operations	31.3%
To compete more effectively on price	25.0%
Other	0.0%

<b>Graphic and Sign Production (n=51)</b>	
<b>Investment Objective</b>	<b>Citing</b>
Increase productivity/efficiency	75.5%
Increase production speed/decrease turn times	55.1%
Automate operations	42.9%
Expansion into a new market	38.8%
Serve an existing market more effectively/efficiently	38.8%
Replace/upgrade aging equipment/software systems	30.6%
Our business is growing and we need to expand capacity	28.6%
To compete more effectively on price	14.3%
Other	6.1%

<b>Package Printing/Converting (n=10)</b>	
<b>Investment Objective</b>	<b>Citing</b>
Increase productivity/efficiency	90.0%
Increase production speed/decrease turn times	70.0%
Replace/upgrade aging equipment/software systems	70.0%
Serve an existing market more effectively/efficiently	60.0%
Automate operations	50.0%
Our business is growing and we need to expand capacity	40.0%
Expansion into a new market	30.0%
To compete more effectively on price	20.0%
Other	0.0%

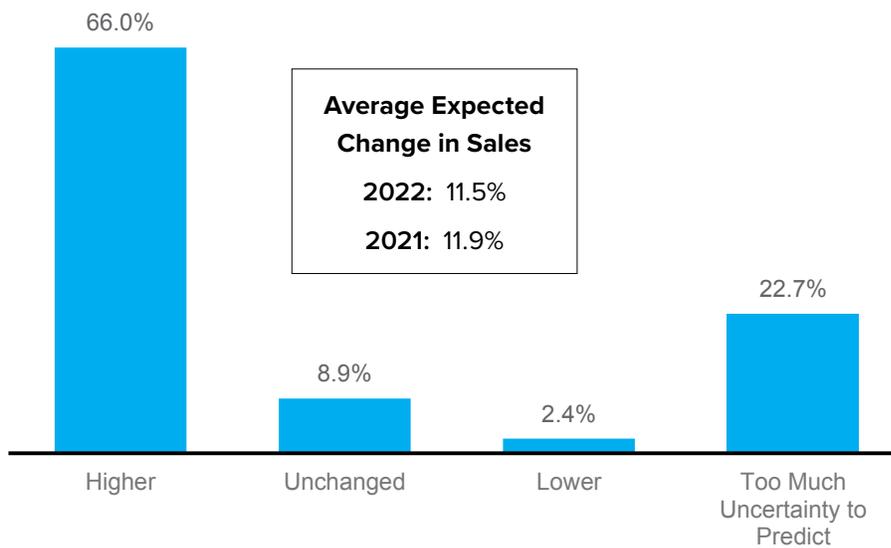
## Section 2: What's Ahead — 2022 Outlook

As we enter the fourth quarter of 2021, it is time to begin looking at 2022. Our vision is clouded by uncertainty about when supply chain disruptions and labor shortages will moderate, which of the tax increases being debated in Washington will become law, how the delta variant (and the government's response) will affect the economy, and whether inflation really is transitory. Based on what we can see, we expect the printing industry to continue growing in 2022 but at a pace that slows noticeably after midyear.

### What SOI Participants Expect

To gauge printers' sentiment about what's ahead, we asked SOI participants a few questions about what they anticipate in 2022. We first asked how they expect their 2022 sales to compare with 2021 sales. Almost two-thirds (66.0%) told us that they expect their sales to rise next year, while only 2.4% said that they expect a decline. Nearly one-quarter (22.7%) say there is too much uncertainty in the current environment to predict what their sales will look like. On average, our research group expects their sales to be up 11.5% next year, after increasing 11.9% this year. (See Figure 8.)

**Figure 8: How 2022 Sales Are Expected to Compare With Year-Earlier Levels**



Q: How do you expect your full-year 2022 sales to compare with your full-year 2021 sales?

n=250

## Section 2: What's Ahead — 2022 Outlook

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### What's Behind the Forecasts

We also asked for an explanation of the forecasts. Among companies expecting growth, 66.2% cited external factors such as an upturn in overall business activity, strength in their major markets, and the easing of COVID-19 concerns and restrictions. We heard about growth in markets from short-run book production to direct mail to promotional products; about growth in healthcare, biotech, and nonprofits; about “pent-up demand”; and about optimism “based on the Delta variant getting under control,” on “more folks back in offices and at shows,” and on “markets that went to zero in March 2020 (trade show, conferences, etc.) now starting to come back.”

But it's not only what's happening outside. Nearly one-third (30.8%) of SOI participants who expect to grow next year cite actions they are taking to increase share of current clients/markets, capture new clients/markets, increase efficiency, and recruit and retain essential personnel. These quotes capture the diversity of actions taken:

- “We became WBE [Women's Business Enterprise], which is very important to our primary client base.”
- “We are well positioned. So many competitors do not have automation, cannot get materials, have labor shortages, and do not have adequate working capital.”
- “Our projections are based on understanding how to operate in a COVID-19 world and being well-positioned to capture new market opportunities that have been developing prior to and within COVID-19.”
- “2021 led us to cultivate hand-picked and better relationships with certain clients.”
- “We have new capabilities, new marketing, and new salespeople.”
- “We have added packaging capabilities.”

Companies that expect sales to decline in 2022 cite ongoing COVID-19 and delta variant concerns; government policies, including mandates, restrictions, and higher taxes; monetary policy – “We will hit a wall of no more free money; then we will hit a recession”; cost inflation; and production and workflow disruptions caused by material shortages and labor shortages – “If we can't find people to work, I can't take on more jobs.”

Companies hesitant to forecast 2022 sales offered explanations such as these:

- “During the summer, clients seemed ready to get back to work. I am not sure if the possibility of higher taxes and vaccine mandates will dampen their enthusiasm to invest in marketing in 2022.”
- “I think it's too early to tell if the economic impact of COVID-19 will linger into 2022. Also, clients' long-term demand may have changed, but I can't tell yet.”
- “It depends on how COVID-19 affects social gatherings and events.”
- “Many of our customers are still in a holding pattern when it comes to their budgets.”
- “No idea what to expect.”

## Section 2: What's Ahead — 2022 Outlook

### Issues Expected to Linger in 2022

Of course, as we end 2021 and enter 2022, the industry's problems will not simply disappear with the new year. Many will linger and continue to affect all segments of our industry. To gauge what 2022 will look like, we also asked printers, in an open-ended question, to describe the issues that they are likely to face in the coming year. As Figure 9 shows, many are a continuation of what we are currently seeing.

For example, 47.7% expect supply chain disruptions/material shortages, 40.5% labor shortages, and 88.2% one or both to be significant challenges over the next 12 months. Nearly 27.0% expect cost inflation to remain a major problem. Government policies make the list for 9.7% and the ongoing effects of COVID-19 make the list for 8.7%.

**Figure 9: Expected 2022 Challenges**

Expected 2022 Challenge	Citing
Material shortages/supply chain disruptions	47.7%
Labor shortages	40.5%
Cost inflation	26.7%
Government policies	9.7%
Ongoing effects of COVID-19	8.7%
External macro factors (e.g., the economy, local business conditions, conditions in our markets, unrest in cities, not enough of population vaccinated)	6.7%
Something specific to our business (e.g., workflow bottlenecks, lack of diversification, insufficient funding)	6.7%
Funding	2.1%
Other	3.6%

Q: What major issues/challenges do you expect in 2022?

n=230

Here's a summary of what they are expecting next year:

- The availability and price of paper will continue to adversely affect all segments of the industry.
- The availability of experienced and qualified workers will continue to hinder printers' ability to hire, improve efficiencies, and expand. Printers may also have to increase wages, which will have an impact on bottom lines.
- Inflation will continue to lead to increased costs, not all of which can be passed to customers.
- Show cancellations are expected to ease, but some have already seen some cancellations into 2022, which affects groups of printers.
- Apparel decorators said that their lack of substrate availability will continue to hinder the industry: "Hats are nearly impossible to find and T-shirts have huge shortages."
- Some clients are hesitant to pay increased rates, which will continue to affect relationships and may lead to major clients shifting to new printers.

## Section 2: What's Ahead — 2022 Outlook

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### **Second-Half Slowdown Expected**

What does PRINTING United Alliance expect in 2022? We expect trouble for both our industry and the American economy from material shortages, labor shortages, and the inflation they create.

Normally the demand side of the economy gets all the attention: How is consumer spending holding up? What about retail sales? But 2021 reminded us that the supply side matters, too. If supply can't keep up with demand because of material shortages, labor shortages, regulatory policy, tax policy, etc., inflation becomes persistent. And persistent inflation eventually slows the economy by eroding real purchasing power, consumer spending, and consumer confidence. As noted in Section 1, nothing we see suggests the supply-side disruptions of 2021 will be quickly corrected.

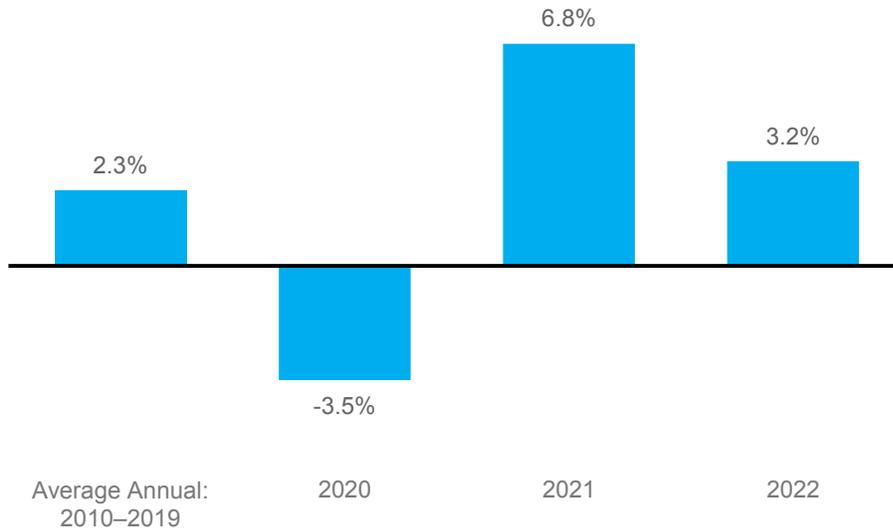
We are also concerned about fiscal policy. The \$3.5 trillion reconciliation bill being debated in Congress includes tax increases and tax credits that will affect individuals, investors, C corporations, S corporations, unincorporated businesses, and pretty much everyone else. The incidence of the taxes –who will pay them – and their effects on incentives matter much more than statutory rates and legislative language. For example, how much of an increase in the corporate income tax will be passed to employees as lower wages and to consumers as higher prices? How much will higher capital gains tax rates reduce investment and so the economy's long-term growth potential? How much will higher individual tax rates encourage tax minimization rather than productivity-building investments? And how much will tax credits increase the size and productivity of the American labor force? The consequences of fiscal policy this extensive are substantial and often unintended.

The Fed is unlikely to tighten monetary policy quickly or sharply enough to slow the economy next year, even if inflation exceeds the target rate by more and longer than expected. And while the delta variant is retarding recovery of the travel, hospitality, and events industries, it is not likely to slow the economy at large. We know much more about the virus than we did a year ago, a large proportion of Americans have been vaccinated or have developed natural immunity, and there is little tolerance for the shutdowns and restrictions of 2020.

## Section 2: What's Ahead — 2022 Outlook

The economy's growth will moderate to 3.2% next year, according to the consensus of economist surveyed by *The Wall Street Journal*. That's about half the 6.8% growth the consensus expects this year – the strongest since 1984 – but meaningfully stronger than the 2.3% average annual gain during the 10 years prior to the COVID-19 recession. (See Figure 10.)

**Figure 10: The Outlook for the Economy**



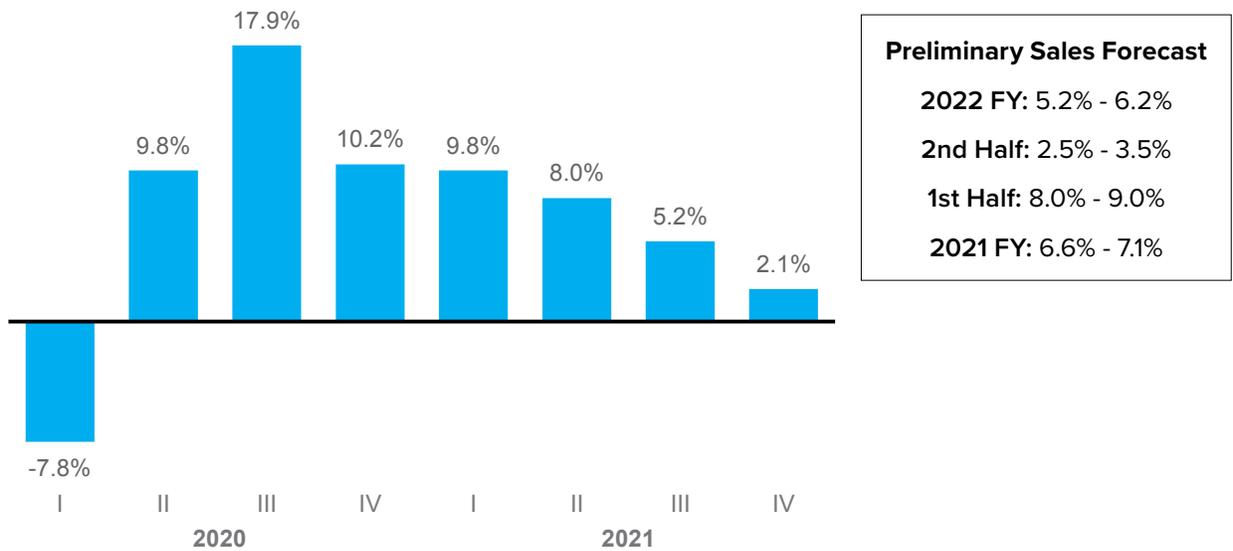
Note: Percent change in GDP, projected for 2021 and 2022, actual for 2020 and annual average, 2010-2019.  
Source of projections: Survey of Economic Forecasters, *The Wall Street Journal*, July 2021.

## Section 2: What's Ahead — 2022 Outlook

Our preliminary forecast has printing industry sales (all sources) increasing 5.2%–6.2% in 2022, by 8.0%–9.0% during the first half and by 2.5%–3.5% during the second half. (See Figure 11.)

Of course, individual printing company results will vary dramatically around industry results, with some far surpassing the industry and some falling far short. The difference will not be company size, equipment configuration, degree of diversification, or any other conventional method of classifying printing companies. The difference will be twofold: First, who best protects themselves from the ongoing supply-side disruptions and all the consequences. Second, as we'll discuss in Section 5, who is best prepared for the post-COVID-19 world.

**Figure 11: Preliminary 2022 Printing Industry Sales Forecast**



Note: Percent change in total printing industry sales (all sources) over same quarter of previous year. All figures are PRINTING United Alliance estimates and forecasts.

## Section 3: Printing Industry Structure

This year, we will release an updated version of the *Printing Industry Market Atlas*, which will include all of the data seen here plus much more, broken out into much greater detail. 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](mailto:dwilaj@printing.org).

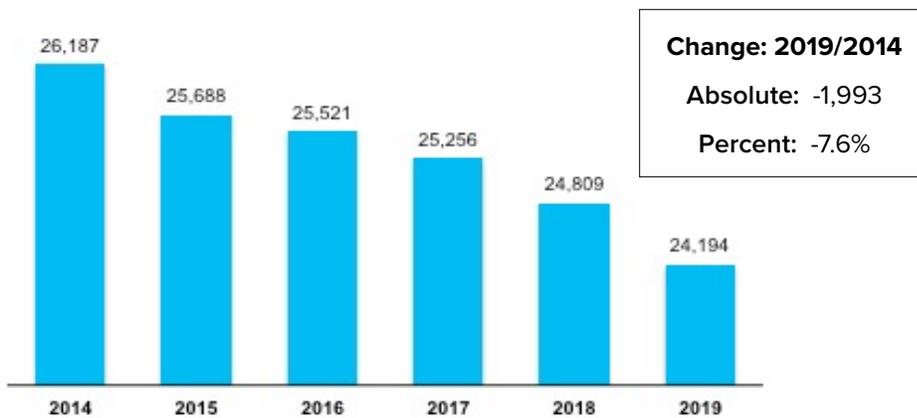
### Decline of Establishments and Employees

Since 2014, the number of establishments and the number of employees in the industry have consistently fallen year over year. The number of establishments in the United States fell by an average of 1.6% per year and by 7.6%, in total, from 2014 to 2019. According to our 2020 estimates, the trend has only been accelerated by COVID-19. Our estimates indicate that the number of printing establishments fell by approximately 7.9% - and this will likely continue once 2021 numbers can be determined. (See Figure 12.)

Although the number of establishments has dropped significantly, do not expect this to mean less competition. In fact, competition will only continue to increase. Consolidation will make large firms even stronger and more capable of capturing a larger market share. Innovation is also accelerated, as evidenced by printer quotes in section 4, which means that surviving companies are becoming more efficient and productive. Fewer companies are now producing the total industry output, so these efficiency gains are necessary. Print organizations may find themselves as laggards in the industry if they do not take the necessary steps to evolve in line with the current state of the industry.

**Figure 12: Establishments With Paid Employees**

2014	2015	2016	2017	2018	2019	Change 2019/2014	2020 Estimate
26,187	25,688	25,521	25,256	24,809	24,194	-1,993	<b>22,283</b>
-2.0%	-1.9%	-0.7%	-1.0%	-1.8%	-2.5%	-7.6%	<b>-7.9%</b>



Source: U.S. Census Bureau *County Business Patterns*  
 Estimates from PRINTING United Alliance

## Section 3: Printing Industry Structure

### Regional Trends

The trends seen above are not limited certain geographic areas. Figure 13 below shows that this decrease is present in every region across the U.S. From 2014-2019, the South Mid-Atlantic region, which includes Delaware, D.C., Maryland, Virginia, and West Virginia, saw the most significant change (-13.5%), while it is expected that the New England states saw the biggest drop in 2020 (-9.3%).

These numbers are broken down state by state in the full, members-only *Print Industry Market Atlas* that is to be released later this year. Values in Figure 13 come from the U.S. Census Bureau *County Business Patterns*. Estimates were developed by PRINTING United Alliance.

**Figure 13: Establishments With Paid Employees by Region**

Pacific (Alaska, California, Hawaii, Oregon, Washington)							
Establishments With Paid Employees:							
2014	2015	2016	2017	2018	2019	Change 2019/2014	2020 Estimate
4,220	4,176	4,097	4,098	4,052	3,939	-281	<b>3,634</b>
-2.4%	-1.0%	-1.9%	0.0%	-1.1%	-2.8%	-6.7%	<b>-7.8%</b>

Mountain (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming)							
Establishments With Paid Employees:							
2014	2015	2016	2017	2018	2019	Change 2019/2014	2020 Estimate
1,682	1,646	1,665	1,648	1,631	1,615	-67	<b>1,507</b>
-1.2%	-2.1%	1.2%	-1.0%	-1.0%	-1.0%	-4.0%	<b>-6.7%</b>

Plains (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota)							
Establishments With Paid Employees:							
2014	2015	2016	2017	2018	2019	Change 2019/2014	2020 Estimate
2,208	2,187	2,140	2,114	2,056	1,999	-209	<b>1,828</b>
-1.6%	-1.0%	-2.1%	-1.2%	-2.7%	-2.8%	-9.5%	<b>-8.6%</b>

North Central (Illinois, Indiana, Michigan, Ohio, Wisconsin)							
Establishments With Paid Employees:							
2014	2015	2016	2017	2018	2019	Change 2019/2014	2020 Estimate
4,589	4,483	4,471	4,419	4,283	4,188	-401	<b>3,834</b>
-2.9%	-2.3%	-0.3%	-1.2%	-3.1%	-2.2%	-8.7%	<b>-8.5%</b>

## Section 3: Printing Industry Structure

### South Central (Arkansas, Louisiana, Oklahoma, Texas)

#### Establishments With Paid Employees:

2014	2015	2016	2017	2018	2019	Change 2019/2014	2020 Estimate
2,503	2,484	2,457	2,445	2,458	2,429	-74	<b>2,280</b>
-1.3%	-0.8%	-1.1%	-0.5%	0.5%	-1.2%	-3.0%	<b>-6.1%</b>

### Southeast (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee)

#### Establishments With Paid Employees:

2014	2015	2016	2017	2018	2019	Change 2019/2014	2020 Estimate
4,771	4,707	4,751	4,673	4,650	4,509	-262	<b>4,168</b>
-1.3%	-1.3%	0.9%	-1.6%	-0.5%	-3.0%	-5.5%	<b>-7.6%</b>

### South Mid-Atlantic (Delaware, District of Columbia, Maryland, Virginia, West Virginia)

#### Establishments With Paid Employees:

2014	2015	2016	2017	2018	2019	Change 2019/2014	2020 Estimate
1,133	1,085	1,066	1,048	1,011	980	-153	<b>892</b>
-1.5%	-4.2%	-1.8%	-1.7%	-3.5%	-3.1%	-13.5%	<b>-9.0%</b>

### North Mid-Atlantic (New Jersey, New York, Pennsylvania)

#### Establishments With Paid Employees:

2014	2015	2016	2017	2018	2019	Change 2019/2014	2020 Estimate
3,687	3,575	3,528	3,505	3,398	3,319	-368	<b>3,037</b>
-2.3%	-3.0%	-1.3%	-0.7%	-3.1%	-2.3%	-10.0%	<b>-8.5%</b>

### New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)

#### Establishments With Paid Employees:

2014	2015	2016	2017	2018	2019	Change 2019/2014	2020 Estimate
1,394	1,345	1,346	1,306	1,270	1,216	-178	<b>1,103</b>
-2.4%	-3.5%	0.1%	-3.0%	-2.8%	-4.3%	-12.8%	<b>-9.3%</b>

## Section 3: Printing Industry Structure

Below, Figure 14 shows the 2019 ranking, since the data are for 2019 ranking of each region by the number of establishments.

**Figure 14: Printing Establishments With Paid Employees by Region**

Rank	Region*	Number of Establishments
1	Southeast	4,509
2	North Central	4,188
3	Pacific	3,939
4	North Mid-Atlantic	3,319
5	South Central	2,429
6	Plains	1,999
7	Mountain	1,615
8	New England	1,216
9	South Mid-Atlantic	980

Source: U.S. Census Bureau *County Business Patterns*

### Where Print Stands Compared to Other Manufacturing Industries

Prior to COVID-19, we see that print ranked third out of 19 among all manufacturing industries in terms of the number of establishments in the United States. Based on our estimates for 2020, the reduction in the number of establishments would drop print down to number 4 – just behind machinery manufacturing. If the trend continues into 2021 and depending on what happens with other industries, print has the potential to drop even further. We will have to wait and see what happens with these other industries once official government data is released, but as of now it looks as if print should remain in the top five as we head into 2022, barring any extreme establishment fluctuations from another industry.

## Section 3: Printing Industry Structure

**Figure 15: Number of Establishments by Manufacturing Industry - 2019**

1	Fabricated metal product manufacturing	54,430
2	Food manufacturing	28,090
<b>3</b>	<b>Printing and related support activities</b>	<b>24,194</b>
4	Machinery manufacturing	22,768
5	Nonmetallic mineral product manufacturing	15,008
6	Furniture and related product manufacturing	14,397
7	Wood product manufacturing	14,223
8	Chemical manufacturing	13,832
9	Plastics and rubber products manufacturing	11,951
10	Computer and electronic product manufacturing	11,870
11	Transportation equipment manufacturing	11,509
12	Beverage and tobacco product manufacturing	10,875
13	Textile product mills	5,605
14	Apparel manufacturing	5,462
15	Electrical equipment, appliance, and component manufacturing	5,402
16	Primary metal manufacturing	4,021
17	Paper manufacturing	3,938
18	Petroleum and coal products manufacturing	2,108
19	Textile mills	1,926
20	Leather and allied product manufacturing	1,171

Source: U.S. Census Bureau *County Business Patterns*

## Section 3: Printing Industry Structure

### Value of Shipments

Aside from employment and establishment data, the Print Industry Market Atlas also contains data on the value of shipments for various geographies. This statistic allows us to see the net selling values of products produced by those in NAICS 323 at both the regional and state level. Figures 16 and 17 below contain this shipment data for the year 2019 – the most recent data produced by the United States Census Bureau.

### Value of Shipments by Region

The table below shows how each region compares in terms of the value of their product shipments in thousands. The North Central region, which includes Illinois, Indiana, Michigan, Ohio, and Wisconsin, is the highest producing region by a significant margin, followed by the Southeast, the North Mid-Atlantic, and the Plains.

**Figure 16: Value of Shipments by Region – 2019**

Rank	Region*	Value of Shipments (\$1,000)
1	North Central	\$19,354,231
2	Southeast	\$14,328,498
3	North Mid-Atlantic	\$12,167,269
4	Plains	\$10,951,451
5	Pacific	\$8,317,550
6	South Central	\$5,152,515
7	New England	\$3,574,918
8	Mountain	\$3,498,065
9	South Mid-Atlantic	\$3,340,213

Source: U.S. Census Bureau *Annual Survey of Manufacturers*

## Section 3: Printing Industry Structure

### Value of Shipments by State

The *Print Industry Market Atlas* also provides this same data at the state level. Figure 17 shows the ranking for the value of shipments by state, which is led by California, Illinois, and Wisconsin.

**Figure 17: Value of Shipments by State – 2019**

State	Value of Shipments (\$1,000s)	State	Value of Shipments (\$1,000s)
California	\$6,670,190	Arkansas	\$838,081
Illinois	\$5,207,207	Colorado	\$827,060
Wisconsin	\$5,012,188	Utah	\$804,939
Pennsylvania	\$4,988,823	Oregon	\$743,617
Minnesota	\$4,814,981	Nevada	\$579,653
Ohio	\$4,219,301	Oklahoma	\$579,486
Florida	\$4,091,164	Alabama	\$417,944
New York	\$3,825,628	Nebraska	\$397,840
Texas	\$3,468,533	West Virginia	\$331,646
New Jersey	\$3,352,818	South Dakota	\$302,676
Georgia	\$2,757,295	New Hampshire	\$296,920
Missouri	\$2,641,004	Louisiana	\$266,415
Indiana	\$2,467,868	Rhode Island	\$262,738
Michigan	\$2,447,667	Maine	\$231,128
Tennessee	\$2,285,214	Vermont	\$214,531
North Carolina	\$1,943,370	Mississippi*	\$147,283
Kentucky	\$1,820,781	Idaho	\$127,236
Virginia	\$1,813,842	Montana	\$126,362
Massachusetts	\$1,656,367	Hawaii*	\$123,187
Kansas	\$1,561,380	Delaware*	\$96,928
Iowa	\$1,233,570	District of Columbia	\$95,241
Maryland	\$1,099,484	New Mexico*	\$79,930
Arizona	\$1,032,815	North Dakota*	\$75,811
South Carolina	\$1,012,730	Alaska	\$58,239
Connecticut	\$913,234	Wyoming*	\$16,961
Washington	\$845,504		

Source: U.S. Census Bureau *Annual Survey of Manufacturers*

\*Estimates developed by PRINTING United Alliance

The *Printing Industry Market Atlas* full report, as well as the executive summary, is expected to be released in the last quarter of 2021. For any questions regarding the report, or to be updated on the release, please feel free to reach out to PRINTING United Alliance economist David Wilaj at any time, at [DWilaj@printing.org](mailto:DWilaj@printing.org).

## Section 4: In Their Own Words

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Throughout the summer, we followed up with many of our State of the Industry Panel members to conduct interviews about the state of their business and what they see for the industry in the future. Topics from the interviews included operating cost inflation, supply chain disruptions and material shortages, and the fallout from COVID-19.

Here is what respondents had to say:

### **We asked printers how they are offsetting increases in costs due to inflation and if they are seeing pushback from clients as some of these costs are pushed on to them:**

In the quotes below, it is clear to see that paper is the most mentioned item when it comes to cost increases. As supplies continue to tighten with no end in sight, printer customers are the ones who will ultimately have to deal with these price increases.

- “We have passed on the increases in hard costs (paper primarily) with little pushback from clients since they are aware of ‘everything’ going up in price in their daily lives. Because of the inflation in the general economy, we don’t have to do much to prepare them.”
- “We have carefully presented changes in our pricing to customers. Those with whom we have had a long-standing relationship gave us very little resistance. Others have complained but continue to do business with us. We are sharing news of our industry (increased paper prices) with our key accounts, so they are aware of the pressures we are facing. As we communicate, we continue to strengthen key relationships.”
- “We raise prices to reflect increases in paper costs and have not had any pushback from customers.”
- “We pass along price increases for paper to clients, most all other cost increases are generally covered by our annual COL price increases. No pushback from clients so far.”

Although the Producer Price Index (PPI) for wood pulp dropped slightly in the spring of this year, it has since risen to an all-time high once again, indicating that price increases for paper may not ease anytime soon. The index is reading 55.8% higher than it was in January 2020. The PPI for paper is also experiencing a steep climb - up 9.3% since the beginning of 2020.

Paper availability is not likely to increase through the end of this year and well into next year as most of the product that is available has already been allocated. In fact, in a presentation from Millcraft, it was estimated that printers will only receive approximately 40% of the paper that they order. As of now, the average paper mills only have approximately 28 days’ worth of inventory (much lower than what is typical). We have also seen about a decade’s worth of paper mill closures between 2020 and 2021 so far.

Freight costs and availability are also hindering the ability of paper mills to produce and deliver their goods. There are not enough truck drivers on the road to efficiently serve every industry, and this is affecting paper as well. The cost of global shipping has also increased dramatically (5x increase for the price of a container to be shipped overseas), which has also limited options of procuring products for many of these printers.

Overall, it is likely that paper availability will not return to pre-pandemic levels until late 2022 at the earliest. In the meantime, all printers can do is procure as much as possible, build an inventory, and complete high-priority jobs.

## Section 4: In Their Own Words

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### **We also asked printers about the fallout from COVID-19: What habits of customers have changed and what do they see that will not return to the way it was prior to the pandemic?**

Some mentioned that they have begun to see changes that will adversely affect their business:

- “Several of our larger accounts have made deep (and even more worrisome) permanent cuts to their print purchase budgets. As we continue to navigate a COVID-19-riddled world, we don’t see much of anything that will go back to its pre-pandemic ways.”
- “We anticipate about a 5% reduction in print buying on a permanent basis due to greater use of remote meetings and remote working.”
- “We are focusing on moving all customers to our online solution for their repeat work. It is easier to work face to face on new or complicated projects; however, we just adapt to our customers’ preferred way of doing business.”
- “A major customer, who did trade shows around the country, has not seen a comeback and we don’t expect it to anytime soon. Other customers continue to use smaller mailings to drive people online.”

While others are seeing changes that have been positive:

- “Most of our clients are fine artists and photographers. I don’t see a huge change in their buying habits; however, more are getting interested in trying their hand at online sales. If they follow through (and we work with them to assist along that line), it could mean a tremendous opportunity for them and us. I believe it will be a long time before we get back to pre-epidemic business behaviors.”
- “We are very busy at the moment and it seems to be steady coming. I hope this trend continues.”
- “Direct mail for us has gone through the roof with people communicating more by mail. We heard from a lot of customers that people were email weary because during COVID-19 there was so much of it and they feel sending direct mail is more impactful and stands out more.”
- “Fortunately for us business has increased in some segments and in some cases are more active than prior to the pandemic.”

The quotes above show us that no two printers are the same and that the pandemic and post-pandemic world will look vastly different depending on the market served and the types of products produced.

Certain segments may see demand accelerate at quicker rates, and others will face issues as certain substrates become more or less available. Overall, it will be important to keep a pulse on the trends of your particular segment to see which direction it is heading.

## Section 4: In Their Own Words

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**Aside from pushing additional costs from price increases on to customers, printers indicated that on average, 17.8% of their additional costs could be offset by productivity and efficiency gains. We asked printers to explain how they made these gains and if they have plans for future gains:**

**Several organizations cited equipment investments for their increased efficiencies:**

- “We purchased some new, more efficient equipment at the beginning of the pandemic and since then, we have also revamped some workflows in order to increase efficiency.”
- “We installed some new equipment that has increased efficiency and helped us to get more done with less people.”
- “We have purchased a couple of smaller, lightly used production machines to increase both productivity and efficiency, making our run times shorter and turns faster.”
- “We have been moving toward greater automation, fewer staff, and greater productivity for many years. Every equipment decision we make is with end in mind.”

Some have not increased efficiencies yet but are in the process of doing so:

- “We just purchased new MIS software. We have not implemented it yet but are hopeful it saves some touches during the production and finishing process.”
- “We are investing in front-end automation (quoting & prepress software/tools), made some capital investments (new presses & finishing equipment) and are revisiting our entire process/flow with the hopes of improved productivity. We believe we’ve been able to use the downturn of 2020 to add some great team members at all of our locations – we believe these talented individuals will also be able to improve productivity.”
- “We are looking for more ideas to enhance automation and are also looking to improve our MIS system to make our organization more efficient.”
- “We are considering changing over from sheetfed offset to all digital printing due to changing our business model, which requires more efficient variable data production and less static production.”

Although rising costs are hindering the industry, one positive can be taken away from the situation. It is forcing printers to evolve in terms of efficiency and productivity. When the dust settles and the supply chain returns to its pre-pandemic form, the companies that remain will be even better suited to operate efficiently and effectively in our industry.

## Section 5: Must-Dos

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Knowing what's happening and likely ahead is helpful. Knowing what to do right now to make what's happening and likely ahead an opportunity rather than a threat is a game changer.

The first three must-dos are about succeeding in the post-COVID-19 world by maximizing virtual/remote selling capabilities, becoming a data-centric organization, and digitally transforming our businesses. The next two show how we can overcome labor shortages by increasing employee engagement and crafting an effective employee value proposition. The last one outlines how to develop strategy in an increasingly competitive, complex business environment.

Share the must-dos with your management team. Download the sources cited for more detail. Build them into a competitive advantage for 2022 and beyond.

### **Maximize Virtual/Remote Sales Capabilities**

No one knows what the post-COVID-19 world will look like. But the smart money is on virtual/remote selling being a big part of it.

In “3 ways COVID-19 is accelerating the future of sales,” Steven Bookbinder describes how the pandemic “upended the B2B salesforce across the world” with “unprecedented speed and scale.” We were forced into virtual/remote selling, and Bookbinder argues, we aren't going back. Among the statistics he cites to make his case: “Two-thirds of B2B decision-makers surveyed believe that their new [remote] model is as effective, if not more so, than previous models,” and “B2B companies expect digital interactions to be two to three times more important to their customers than traditional sales interactions.”

How do we prepare for the new world of sales? Bookbinder recommends five steps.

- **Develop the sales team's social-selling skills.** This goes far beyond emails and virtual calls to mastering the complete digital sales process. Teach sales reps about the digital platforms clients and prospects use and how they can use those platforms to research client needs, preferences, and behaviors, generate leads, follow up on the leads, and “get to know customers again” because “what was true pre-COVID-19 may not be true now.”

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- **Help each sales rep develop a “social-selling persona.”** The bedrocks of successful sales —building relationships, building trust, establishing expertise, etc. — are the same for remote selling as they are for face-to-face selling. Bookbinder argues that an effective social-media persona enhances those bedrocks. Equally important, it connects sales reps with decision makers. The evidence: “75% of B2B buyers and 84% of C-level or vice-president level executives use social media to make purchasing decisions,” according to International Data Corporation. Bookbinder’s keys to a social-selling persona that moves the needle:
  - **Share unique insight.** Retweeting the same content as everyone else just “adds noise to everyone’s newsfeed.” Do research. Look inside and outside your markets for insights of value to clients and prospects. Look for the thought-provoking and the contrary opinion. Add a personal explanation of why you are sharing the content.
  - **Be omnipresent.** Sales personnel must think “holistically when it comes to which [social media] platforms they use and how to engage with current and prospective customers. In other words, you can’t think of Facebook, Twitter, Instagram, Snapchat, LinkedIn, etc. as separate. You need to think about how you can integrate each platform into a comprehensive social media marketing strategy.” Have a “consistent voice and style across each platform” that clients and prospects can recognize. And use social-media tools such as Hootsuite, Sprout Social, and Buffer to “sort relevant messages from noise, tune into only what their leads are sharing, monitor social activity, and publish messages to multiple networks.”
  - **Be a listener.** Through social media, clients and prospects tell us “exactly what they want, need or desire,” the questions they need answered, critical business trends and issues, opportunities, threats, what they think of us, and what they think of our competitors. Listen carefully. Use the intelligence to craft a sales and communication strategy that shows why they should partner with you.
- **Create a standard operating model.** Bookbinder emphasizes that “virtual sales require the same discipline and standardization as face-to-face sales.” Processes and procedures must be carefully defined and communicated. Expectations should be established, “spelling out what Monday to Friday should look like for reps” down to “how much time they should spend generating new leads and how much connecting with existing customers.”
- **Base sales decisions on data.** This is part of being a data-driven company, which experts agree will also be essential to success in the post-COVID-19 world. (See the must-do that follows.) Show sales personnel how CRM data can help “prioritize leads and personalize messaging”; how your website’s chat feature can be used to service clients, identify needs, and build relationships; and how monitoring social-media conversations can “adapt your sales pitch to the unique concerns and challenges of this specific moment.” Bookbinder writes: “Putting the right data-driven tools in your rep’s hands can help them capture a 360-degree view of your customers — and act fast and effectively on crucial opportunities.”
- **Be prepared for resistance.** Big change is always met with resistance. And virtual/remote selling is a big change.

(For more, see Bookbinder’s “How to Craft a Compelling Social Selling Persona: 5 Key Considerations,” [impactplus.com](http://impactplus.com).)

In summary, a company’s performance and prospects are always determined far more by how it prepares for and manages defining trends than by the trends themselves. Bookbinder’s advice helps us prepare for one of the most consequential post-COVID-19 trends: The growing importance of virtual/remote selling.

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### Prepare for the Data Age

The amount and variety of data available to our businesses continues to expand rapidly, as does the capacity to capture, store, and analyze that data. We're in the data age, and data-driven companies will be the big winners.

But what is a data-driven company? And how do we become one?

Tom O'Neil, chief cloud officer at Sisense, a provider of AI-driven business intelligence software, defines data-driven companies as companies "that maximize the potential benefits of their data" by developing "efficient processes to turn data into action and actions back into data." They reduce risk by "developing rigorous decision processes and fostering evidence-based cultures." And they treat data as a business asset, recognizing its value in uncovering critical intelligence such as how client preferences are changing, whether a new production process is meeting expectations, which marketing campaign shows the most promise, and how employees are responding to a new HR initiative.

The experts agree that, although there is no single path to becoming a data-driven company, these steps are essential:

- 1. List the data currently collected.** Think broadly, including all types of data from all sources. As Larry Alton, author of "6 Ways Small Businesses Can Become More Data Driven," [smallbiztrends.com](http://smallbiztrends.com), reminds us, data is not limited to numbers in a spreadsheet. It's anything — customer comments on social media, activity on your chatbot, Web search trends, response to social media ads, use of your mobile app, readership of your blog, etc. — that provides insight into your company's performance and prospects.
- 2. Evaluate utilization.** Who is using the data we are collecting? Who else should be using it? What data are we collecting but not using? Should we continue to collect that data?
- 3. Create a data strategy based on business objectives.** The key, according to Toni Sekinah, author of "11 Tips to Become a Truly Data-Driven Company," [thenextweb.com](http://thenextweb.com), is to start with our business objectives and identify the data needed to achieve those objectives. Think of it as distinguishing between data that's nice to have and data that we must have. Ask which data is essential to measure progress toward our objectives, if we have the data, and if we don't, how we're going to get it. Sekinah quotes Mike Bugembe, author of *Cracking the Data Code*, who warns that not carefully aligning data with business objectives results in indiscriminately collecting and analyzing data that isn't going to get us where we want to go. That leaves us "data-rich but insight-poor," and puts "ROI at risk because data is only valuable when it is used appropriately to deliver real results."
- 4. Teach staff the importance of basing decisions on data.** In our industry, where opportunity continues to expand but margin for error continues to shrink, we are either improving or falling behind. Show how basing decisions, processes, and procedures on data supports continuous improvement, drawing on examples such as the payoff from using data to more effectively manage inventory or increase client retention. Regularly remind employees (and ourselves) that we don't need to hit home runs: Small improvements across departments and functions add up to substantial improvements company-wide.
- 5. "Foster a culture of data literacy."** That's what Sekinah calls it. Help employees — including non-technical employees — identify the KPIs they should be monitoring, interpret the KPIs, and use simple but effective methods such as 3-month, 6-month, and 12-month moving averages to uncover trends. Business intelligence tools such as Thoughtspot, Targit, Snowflake, and DataRobot can help develop data literacy.
- 6. Tell a story with data.** Cohesive stories hold interest, convey meaning, and are retained far better than mounds of data. Sekinah writes, "good data storytellers have the ability to convince and persuade. Studies have shown that charts and graphs can make people change their minds more easily than words can."

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- 7. Democratize data.** That is, make it widely available. Sharing data across functions and departments uncovers correlations, relationships, and patterns that can easily remain hidden when data is siloed. Tom O’Neill argues that including diverse groups in data analysis helps “reduce the biases that homogenous groups exhibit” and “minimize blind spots and maximize potential solutions.”
- 8. Encourage honest, prompt analysis and reporting.** Positive, negative, or neutral, what do the data say? Alston recommends rewarding employees who bring “data-inspired ideas, such as a new product or an untapped target market” to our attention. Equally important, encourage employees to come forward with disappointing results. The sooner we know something isn’t meeting expectations, the sooner we can make corrections. As Adrian Coy, founder of Off The Shelf Analytics, emphasizes: “Being data-driven actually enables organizations to take more risks because they know they can quickly see when it’s not working and course-correct when necessary.”
- 9. Require decisions be data based.** It’s difficult to break the habit of basing decisions on gut, hunches, or what we think is right, especially when we don’t like what the data is saying. That’s why “the biggest challenge in becoming more data driven is cultural,” according to Alston. He writes: “When you need to answer a business question, everyone must defer to the data and make data driven decisions.”
- 10. Assign accountability.** That many have access to data does not dilute accountability. In data-driven companies, someone is ultimately responsible for ensuring data collection, maintenance, and analysis maximize the odds of achieving business objectives. As Coy puts it, success ultimately “depends on the data being done right. Bad data is worse than no data. Make sure there is someone responsible for it.”

The experts agree on one more point: There is no end to becoming a data-driven company. There is always opportunity to improve further. Knowing that is a first step toward winning in the data age.

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### Digitally Transform Your Business

Articles about preparing our businesses for change in the aftermath of COVID-19 — about future-proofing them — emphasize the importance of digitizing processes and procedures. That’s spot on. But as Agnes Teh Stubbs explains in “5 Keys to a Successful Digital Transformation Process,” [getapp.com](https://www.getapp.com), there’s a lot more to successful digitization than purchasing technology.

Stubbs defines digital transformation as “finding ways to integrate digital technologies into your processes in order to help your business provide products and services more efficiently.” Creating a chat capability on your website is an example. So is introducing software that generates and analyzes data on a key production process.

She explains that there is no single best way to digitize and that digitizing one part of a business has profound effects on other parts: “Whether you’re looking to automate existing processes or introduce digital technology for a new project, the move towards digital transformation requires an integration of digital technology into all areas of your business.” Her steps for successful digital transformation:

- 1. Review current processes and technologies.** Document the steps in each major process, with input from employees who are closest to the process. List in-house technologies, what they are supposed to do, and how well they are doing it. Answer questions such as: What parts of the business would benefit most from digitization? Where do we most need to automate? How will digitizing/automating in those areas affect other areas — particularly staff? Stubbs calls it “a complete 360-degree assessment of your business operations” that will “help you understand how existing processes work alongside one another in order to determine changes that need to be made, and potential challenges that could surface should these processes change.”
- 2. Connect strategy to business objectives.** Define “the specific and measurable business goals” we want to achieve as a result of our digital transformation strategy. What will success look like? What, exactly, do we need digitization to accomplish and by when? Stubbs uses improving customer experience by introducing an online portal as an example. A specific and measurable goal would be 100 customers using the portal within one month of launch. This step requires two actions: Define the exact goals of digital transformation and ensure we can collect the data necessary to measure progress toward our goals.
- 3. Get commitment by explaining the “why” in plain language.** We will be asking employees who may have been doing their jobs the same way for years to work in a new way. We’ll need a plan to communicate “why a new digitized process is an improvement” and “the pain points and challenges the technology is aiming to solve.” For example, the cloud inventory software we’ll be installing will allow us to manage inventory much more efficiently, reducing costs, increasing profitability, and ensuring we have what our customers need when they need it. Stubb’s advice: “Educate stakeholders at all levels on the benefits of the technology in terms that make sense in the context of their day-to-day work experience — point out ways in which routine tasks will get automated and key metrics will be more accurately measured. Doing so will ensure they feel both empowered and a crucial part of the digital transformation process.”
- 4. Test how well the new technology integrates with current systems.** The goal of digitization is to enhance the whole, not to eliminate inefficiencies in one department only to create them in other departments. Effective pilot testing will uncover the complete effects of digitization — that is, where the opportunities and challenges will be company-wide, not just in the process being digitized. The sooner we identify opportunities and problems, the sooner we can enhance the former and minimize the latter.

Stubbs concludes with this reminder: “Digital transformation is not a one-time task, but a continuous process that requires constant evaluation and investment of resources. It is one that requires deliberate planning of technologies, processes, and employee education and training.” It’s also one that positions us for sustained success in the post-COVID-19 world.

## Section 5: Must-Dos

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### Build Employee Engagement

How many of our employees are engaged? That is, how many are not just satisfied with their jobs but dedicated to moving the company forward?

The answer matters, according to Jim Harter, Ph.D., chief scientist for Gallup's Workplace Management Practice. Harter writes, "across more than two decades, even during massive changes in the economy and technological advances," employee engagement has been "a consistent predictor of many important organizational outcomes." Among the statistics he cites: Participants in Gallup research with the highest employee engagement typically outperform participants with the lowest by 10% in customer loyalty, 23% in profitability, 18% in productivity, 64% in safety incidents, and 81% in absenteeism.

It makes sense when you consider how engaged employees differ from everyone else. In "5 Powerful Steps To Improve Employee Engagement," [www.forbes.com](http://www.forbes.com), Brent Gleeson explains that every company has three types of employees. The not engaged are one type. They are good, reliable employees who are happy with their jobs, co-workers, and employer. They do what they are paid to do -- but rarely anything more. The disengaged are another type. They dislike their jobs and employer and want everyone to know it. They can rarely be advanced to "A-level players," and if unchecked "can easily spread toxicity throughout an organization." The engaged are a third type. They are defined by discretionary effort, are dedicated to helping the organization succeed, and regularly go beyond job requirements and to find a better way. Their interests and the company's interests align.

Gleeson puts the averages for the American workforce at 67% not engaged, 18% disengaged, and 15% engaged.

So how do we build employee engagement? Gleeson recommends starting with the prerequisites, which include ensuring employees:

- Know what's expected of them, including the quality of work expected.
- Have the resources and training required to succeed.
- Have opportunities to learn and grow, professionally and personally.
- Receive regular performance evaluations, recognition, and constructive criticism.
- Trust that supervisors have their best interests in mind.
- Know that their opinions are encouraged, valued, and acted on.
- Understand the company's mission and purpose and how they contribute to each.

He also emphasizes that engaged employees and employees who can be advanced from not engaged to engaged value frequent evaluation of their performance. Annual or semiannual reviews aren't going to do it for them. Instead, "use both formal and informal check-in strategies — and use them every week." An additional benefit: "faster course correction."

Kellie Wong's "24 Actionable Employee Engagement Ideas and Activities," [achievers.com](http://achievers.com), include the following:

- Pulse surveys. Brief, periodic (Wong recommends quarterly) surveys that "help identify what employees are feeling, and why they are feeling that way." Conditions change too quickly to rely on an annual survey alone.
- Workplace chatbot. An around-the-clock opportunity for employees to share recommendations, opinions, and concerns with management. A chatbot is particularly helpful for employees who are not comfortable sharing face to face.

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- Act on employee feedback. Collecting feedback but not acting on it is probably more damaging than not collecting it at all.
- Keep employees informed. Wong's advice: "Be as transparent as possible and use multiple channels, whether it's Slack announcements, company meetings, or a page on your intranet. The more trust you build, the more likely employees are to be direct and honest with you when they have concerns."
- Timely, personalized employee recognition. Recognize employee contributions when they occur, not months later at the company awards ceremony. Communicate the recognition company-wide so everyone knows what's being rewarded and why. Personalize rewards, e.g., a gift card for something you know the employee enjoys or needs: "Personalized rewards based on what really excites a particular employee are far better motivators than generic t-shirts or one-size-fits-all water bottles and watches." Recognize actions that reflect core company values: "Regular recognition for embodying company values reinforces behaviors you want to encourage and deepens the meaning of your organization's stated values." Finally, recognize personal achievement to show that "you don't view your employees as interchangeable cogs but as unique individuals."
- Giveback programs. Encourage employees to raise funds for a charity of their choice, matching their contributions, if possible. This both increases engagement and builds a "strong sense of community" among the employees involved.
- Personalize the employee experience. Wong asks: "We learn as much as possible and tailor programs and services to meet the needs of our customers. Why wouldn't we do the same for the people who actually work in our organizations? By knowing what motivates individual employees, we "can create a holistic experience that engages them daily."
- Support employee development. "Whether it's providing tuition reimbursement or allowing them to attend an online class during work hours," investing in employee development demonstrates our "commitment to them over the long term" and makes employees "far more likely to stay and apply those newly learned skills." This brings to mind Levi Lusko's advice: "Don't ask, 'what if we train employees and they leave?' Ask 'what if we don't train them and they stay?'"
- Create a mentorship program. Even veterans can benefit from mentorship, as technological advance changes skill requirements across a broad spectrum of jobs. Also, employees who believe their jobs are leaving them behind are on a fast track to disengagement.

Department managers are essential to building employee engagement, according to Robyn Reilly, author of "Five Ways to Improve Employee Engagement Now," [www.gallup.com](http://www.gallup.com). She writes: "The best managers understand that their success and that of the organization relies on employees' achievements ... They seek to understand each person's strengths and provide employees with every opportunity to use their strengths in their role." Rather than focusing on weaknesses, "great managers empower their employees, recognize and value their contributions, and actively seek their ideas and opinions." Recruiting and developing that kind of manager "greatly increase the odds of engaging their employees."

Sharing the company's mission with employees is also essential, as Mark Tarallo explains in "Coach to Your Team's Strengths to Improve Employee Engagement," [www.shrm.org](http://www.shrm.org). Explain where the company plans to go, how it plans to get there, and how employees will contribute. Including the company's contributions to the community, how the community benefits, and how employees can participate will appeal to the growing number of employees who are "keen on being engaged with work that has a purpose, and that is a positive reflection on their values."

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Finally, the experts agree that maximizing employee engagement should be a primary consideration in all hiring. Tarallo cites the acronym BEST, developed by Bob Kelleher, founder and president of The Employee Engagement Group, to make the point. Tarallo writes, “Employers tend to hire for the middle two letters, education (E) and skills (S), in hopes that they will be the most reflective of performance. But it is the first and last letters, behaviors (B) and traits (T), that best reflect employees’ values” — and so their fit and likelihood of becoming a fully engaged employee.

Building and maintaining employee engagement is a heavy lift. But the payoff in retention, productivity, and profitability justifies the effort. (To learn more, download Gallup studies, *The Powerful Relationship Between Employee Engagement and Team Performance* and *How to Improve Employee Engagement in the Workplace*, at [news.gallup.com](https://news.gallup.com).)

### **Create an Employee Value Proposition**

We are competing for productive, desirable employees. An effective employee value proposition (EVP) can help us win the competition.

An EVP concisely states what we expect of employees and job candidates and what they can expect of us, according to John Beyer, author of “Employee Value Proposition: What It Is and Why You Need One.” An EVP is not a tag line or job description. Rather, it is how we want to be defined as an employer — opportunity for professional development, work/life balance, a safe work environment, respect for the individual, etc. — and what we expect of every employee regardless of position — create customer value, support colleagues, aim for continuous improvement, etc.

An employee value proposition prequalifies job candidates, increasing our odds of hiring engaged, long-term contributors and decreasing resources spent onboarding and training personnel who are not likely to be a good fit. The message: If our EVP appeals to you, apply; if it doesn’t, you’ll be better off somewhere else. It also distinguishes us from all the others who are competing for the same talent. Beyers writes: “Both current and prospective employees are looking for more than a great salary and benefits. Job seekers put more emphasis on a company’s culture and mission than compensation ... A well-established EVP will help you articulate what your organization can offer beyond the usual salary and benefits.”

Whether to have an employee value proposition or not isn’t the choice. As Carrie Sanchez, author of “How to create an employee value proposition,” emphasizes, every company has an EVP because current employees, former employees, job applicants, and the competition are talking about its HR practices on Glassdoor and a lot of other places. The choice is between letting others create our EVP or creating it ourselves by carefully matching company goals with what appeals

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most to employees who will help us achieve those goal. That's a no-brainer.

So how do we do it? Beyer and Sanchez recommend these steps:

- 1. Research.** Get the facts from current employees, former employees, and job applicants. Use surveys, one-on-one interviews, focus groups, exit interviews, the onboarding process, and the job application. Among the questions Beyer recommends:

Current employees

- What attracted you to the company? Have your initial expectations been met?
- Which factors (salary, health plan, PTO, culture, job satisfaction, etc.) do you value most and why?
- What about your work is most rewarding?
- Why have you stayed?

Former employees

- Why did you leave?
- What would you say to someone considering a job opportunity here?

Job candidates:

- What's your opinion of the company and why? How did you form that opinion?
- Why would you like to work here? What most appeals to you?
- Which factors (salary, health plan, PTO, culture, job satisfaction, etc.) are most important when you consider a job and why?

- 2. Analysis.** Look for themes and patterns – negative as well as positive – in the data collected and the reasons for them. Don't be distracted by outliers; focus on what's representative.
- 3. Draft the EVP.** Base the draft on what we've learned appeals most to our best employees. Is it challenging, rewarding work? A particular set of benefits? Company culture? Opportunities for advancement? Sanchez emphasizes that drafting an EVP "is less about finding the 'one thing' that makes your business different, and more about understanding the unique combination of value-adds that characterizes your organization."
- 4. Test the draft EVP.** Share the draft with current employees. Do they think it's on target? Beyer recommends they evaluate the draft as employees – "Does this EVP align with their desires and what the company is actually delivering?" – and as if they were job candidates – "Would this EVP resonate with them as a job seeker considering an opportunity with your company?"
- 5. Keep the EVP current and relevant.** What we offer employees and expect in return will change, as will what employees and job candidates expect from us. Regularly update the research described in step 1 to ensure the continued relevance and effectiveness of our EVA.

Of course, results are what matter. If our EVA has improved recruitment, retention, and engagement, we build on it. If it

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hasn't, we correct it. Either way, we're making labor shortages our opportunity and the competition's problem.

### Evaluate the Complete Strategic Landscape

We know that an effective business strategy is essential to our long-term success. But are we thinking correctly about strategy? Are we thinking of adaptable strategy that promotes success in markets that are changing rapidly and often unpredictably? The answer, according to David J. Collins, is not unless we are thinking in terms of the “complete strategic landscape.”

In “Why Do So Many Strategies Fail?” [www.hbr.com](http://www.hbr.com), Collins explains that strategy has traditionally been “about aligning the organization behind a clear direction.” That's still important, of course, but today strategy must be expanded “to carefully coordinated choices about the business model with the highest potential to create value, the competitive position that captures as much of that value as possible, and the implementation process that adapts constantly to the changing environment while building the capabilities needed to realize value over the long term.”

He defines five factors that collectively make up the complete strategic landscape. We must evaluate all five, understand how they interact, and integrate them into a “holistic” approach to strategy. The five factors:

- 1. The Opportunity Set.** Changes in our clients' communication needs, preferences, and habits create opportunity. So do emerging technological, demographic, social, economic, regulatory, and environmental trends. Strategy begins by identifying those changes and trends and then deciding which are opportunities given our unique resources, capabilities, and goals. Notice that we aren't just chasing the next big thing; we are carefully measuring fit. If we don't, we're playing “whack-a-mole,” as Collins puts it.
- 2. Value-Creation Potential.** In our low-barrier-to-entry industry, we'll have plenty of competition for the opportunities we identify. Therefore, our next step is to define a business model that lets us create more value than the competition. Collins writes: “To translate an opportunity into strategy, CEOs need to develop a business model that maximizes the potential value of their offering.” We do that by answering questions such as: What's the “job to be done” for customers? How will we charge for our products and services? What assets – human capital, as well as physical and financial capital – will we need to produce and deliver them? Will we be going up against companies much like ours or a new breed with whom we are not used to competing?
- 3. Value Capture.** This is about building competitive position/advantage. Two steps are essential. First, define scope, or which parts of the target market we will pursue and, just as important, which we will not pursue. Second, define a specific value proposition for our target market showing how members of the market will benefit from partnering with us. This is not our equipment and capabilities list but a statement of how we will

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create ROI for them. Quoting Collins: “Identifying a unique value proposition for a defined customer group and a distinctive configuration of activities is still the best way to build a competitive advantage.”

**4. Value Realization.** This is execution, or putting the strategy developed in steps 1–3 into action. Collins emphasizes that to execute successfully, we must:

- Continuously create operational efficiencies: “If you simply cannot achieve operational efficiencies, you are condemned to fail, regardless of how exciting your business model is.”
- Enhance adaptability: “To keep capturing value, a firm needs to constantly adapt to how it implements its strategy – adjusting its activities and building new capabilities as the external environment changes ... This typically does not mean the CEO has to reformulate the entire strategy; it’s more about making incremental changes to respond to new realities.”
- Ensure internal resources are aligned with strategy: “It’s in developing plans to realign the firm’s activities that strategy plays out every day – not in its initial grand design. Tactical though they may appear, these adaptations are fundamentally strategic because they cut across functions inside the firm and require systemic change. Yet too many CEOs give them short shrift.”

**5. Outcome.** Closely monitor performance. Has our analysis of the strategy landscape positioned us for sustained success by creating the financial resources and adaptability we’ll need? If not, what adjustments do we have to make?

Collins warns that it is easy to fall into the trap of focusing on only one part of the strategy landscape. For example, well-established companies “often focus too much on value capture and not enough on value creation and how the firm’s activities and capabilities need to evolve over time.” Maybe their environment has been relatively stable, so a focus on value capture becomes “engrained in strategy.” Or maybe they have “aligned their operations with their distinctive market position so tightly that they can’t adapt when customers’ tastes change.” Either way, one day their environment will change and their long-term success will be jeopardized.

In contrast, the startup (or new market entrant) tends to focus on value creation at the expense of value capture. They may be so excited by a new opportunity that they forget growing markets invite new competition. Without a defensible competitive position and strong value realization, their gains are short-lived.

A summary that accompanies Collins’ article puts it this way: “Strategy involves more than finding an attractive industry or defining a competitive advantage. It requires an aligned set of decisions about which opportunities to pursue, how much value the firm can create and capture, and how to keep realizing value and build a foundation for long-term success.”

We have created a set of must-dos, including reading weak signals, social listening, and the opportunity evaluation matrix, that can help analyze the complete strategic landscape. Let us know and we will send them over.

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# WHO WE ARE

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PRINTING United Alliance is the most comprehensive member-based printing and graphic arts association in the United States, comprised of the vast communities which it represents. The Alliance serves industry professionals across market segments with preeminent education, training, workshops, events, research, government and legislative representation, safety, and environmental sustainability guidance, as well as resources from the leading media company in the industry – NAPCO Media. Now a division of PRINTING United Alliance, Idealliance is the global leader in standards training and certification for printing and graphic arts operations across the entire industry supply chain.

PRINTING United Alliance also produces the PRINTING United Expo (Oct.19-21,2022, Las Vegas), the most influential days in printing. The expansive display of technology and supplies, education, programming, and services are showcased to the industry at large, and represents all market segments in one easily accessed place.



NAPCO Research crafts custom data-centric solutions that leverage our highly engaged audiences across the markets in which we operate, our industry subject matter experts and in-house research expertise. We partner with our clients to identify their unique business problem and create solutions that enable deeply informed decision-making.

Contact [research@napco.com](mailto:research@napco.com) to talk with our analysts to find out how we can help you with your research needs.