

Trends and Services in the In-plant Industry (2022)



In-plant Impressions



Trends and Services in the In-plant Industry

INTRODUCTION

In-plants are expanding the variety of services they offer to increase the value they provide to their parent organizations. This trend has accelerated over the past two years as the COVID-19 pandemic slowed demand for traditional mainstays like forms and manuals, and pushed in-plants to offer new varieties of signage and graphics. These are some of the key findings of a new study conducted by *In-plant Impressions* and NAPCO Research that examines the changing world of in-house printing.

Often overlooked, in-plant printing operations play a crucial role in the success of many of the world's leading companies and organizations, providing quick service at a low cost. But convenience and savings are only two of the valuable benefits in-plants provide. Integral to their parent organizations, they ensure that all printed materials adhere to corporate branding guidelines. Their in-house location enables them to keep organizational data secure and confidential. As employees, in-plant personnel have a stake in the organization's success, which inspires them to go above and beyond to help their internal customers succeed.

Unlike many internal departments, today's in-plants are run like businesses. They promote their services, monitor their expenses, and in most cases charge back for the printing they produce. They track their savings and benefits in detailed reports for management and benchmark with peers to ensure their capabilities and business practices are up to date.

RELIABLE AND RESILIENT

The survey results on the following pages reinforce this description of 21st century in-plants as professionally run businesses invested in their parent organizations' success. Their ability to step up quickly in a crisis to help their organizations was put to the test during the COVID-19 pandemic. In-plants were one of the few departments that remained open while others transitioned to remote working. They produced heavy volumes of COVID-related signage, floor graphics, literature, and other essential printed products needed by their organizations. In-plants truly proved their value when they were needed most.

But while signage printing boomed, other traditional print work declined, leaving many in-plants in a period of uncertainty that continues today. One survey respondent summed it up well:

"COVID was very good for our business because of the massive amount of safety signage we produced. Print volumes and revenues are declining as our schools are more heavily using the laptops we issued to all students during COVID. Because the signage and other large-format [work] remains strong but conventional print and copy has declined without in-person large events, the net long-term [situation] is unclear ... but our business is much different now than it was two years ago."

As the pandemic lingers, and printing needs change, in-plants are adding new services and applications needed by their organizations to continue providing value. The data in this report will show where they are focusing their efforts and how their recovery from COVID is proceeding.



RESEARCH METHODOLOGY

To better understand the current state of the in-plant market in the United States, IPI conducted a detailed online survey of in-plants in January 2022 using our extensive database. We received 138 qualified responses. C.P. Bourg sponsored this research project.

Here is a breakdown of the market segments and the number of survey responses from each:

Respondents by Market Segment

PARENT ORGANIZATION	PERCENTAGE	NUMBER
College/University	36%	49
School District	22%	30
Government/Military	16%	22
Healthcare	9%	12
Non-Profit Association	6%	8
Insurance	2%	3
Manufacturing	2%	3
Retail/Wholesale	2%	3
Telecom/Utilities	2%	3
Entertainment/Hospitality	1%	2
Transportation/Communications	1%	2
Financial Services/Banking	1%	1

Q: What is the primary business of your parent organization? N=138

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THE IN-PLANT MARKET

In-plants serve a variety of organizations ranging from educational institutions and government agencies to manufacturing, health care, nonprofit, insurance, and retail businesses. The sizes of these in-plant operations vary widely depending on the needs of their parent organizations.

Our research reveals that the average number of employees at respondents' in-plants is 12 (Fig. 2). This number factors in many smaller in-plants with one to five employees (44% of respondents fall in this range), as well as several in-plants with more than 40 employees (5% of respondents). The median number of employees in our list of respondents is 6.

In-plants are generally supported by an annual operating budget from their parent organization, though in most cases this budget number is more reflective of the annual revenue generated by the in-plant from charging back for its services. The

EMPLOYEES

Average: 12 Median: 6

OPERATING BUDGET

Average: \$2,237,027 Median: \$890,000

Figure 2

budget figures reported by survey respondents ranged from below \$100,000 at small operations with limited capabilities to \$24 million at one of the largest in-plants.

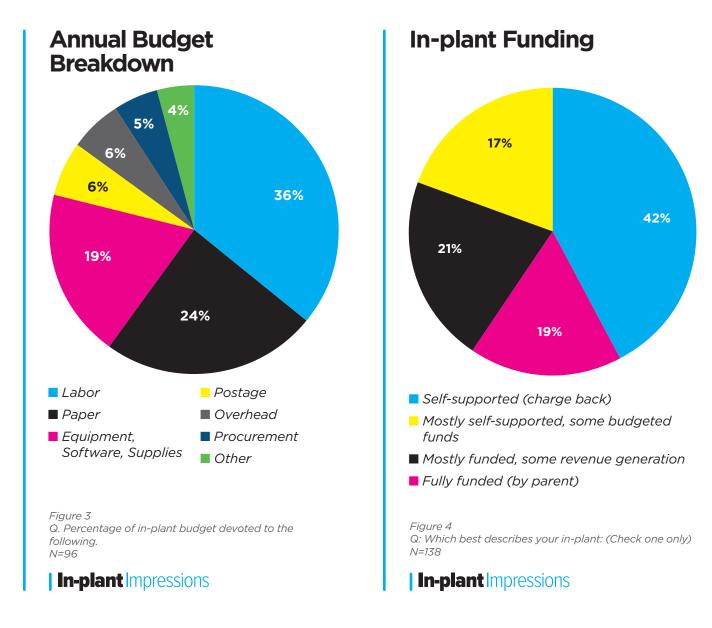
Approximately 47% of respondents have budgets in excess of \$1 million, and 10% have budgets of more than \$5 million. The average operating budget is \$2,237,027 and the median budget is \$890,000. Comparing these numbers to the pre-COVID numbers in our 2020 industry survey, we can see that current average budget figures are 23% lower than they were before the pandemic.

BUDGET DISTRIBUTION

Most of this money goes toward labor expenses, with respondents estimating they spend an average of 36% of their budgets on labor (Fig. 3). Paper is the next biggest expenditure, consuming nearly a quarter of budget dollars. Equipment, software and supplies rank third on the expense list, with 19% of budgets going here. (Assuming an average budget of \$2,237,027, this means in-plant respondents spend an annual average of \$425,035 on equipment, software, and supplies.)

It's worth pointing out that 5% of in-plants' budgets go to procurement (of printing, prepress and bindery services) for the parent organization. This is because few in-plants, if any, can print everything their organization needs and must contract with outside printers. Overall, our research found that 61% of all in-plant respondents handle procurement for their organizations.

The majority of in-plants charge back for their services; 59% say they are fully or mostly self-supported, with an additional 21% providing "some revenue generation" to offset their costs (Fig. 4).



DIGITAL GROWTH

In-plants led the printing industry's transition to digital printing in the early 1990s. They moved from offset to toner-based technologies much earlier than commercial printers and have continued to build upon the digital opportunity. Today, nearly 100% of in-plants run digital printing equipment, and according to survey respondents it generates the largest percentage of their revenue — an average of 61% (Fig. 5). This is a notable decrease from two years ago when in-plants participating in our survey reported digital printing accounted for 79% of their revenue.

What has grown, however, and accounts for some of the shift in revenue, is wide-format printing. While it generated 9% of in-plant revenue two years ago, it now accounts for 14% of revenue. This can be attributed, in part, to the strong demand for COVID safety signage over the past two years, which greatly increased wide-format volumes for many in-plants. Currently, 81% of respondents have wide-format printing capabilities, up from 77% two years ago and 69% in 2018.

Other services that now make up a greater percentage of in-plant revenue are mailing and fulfillment, which went from 2% of revenue in 2020 to 8% today. Part of this increase likely came from the need for kitting services over the past two years, where in-plants packed boxes with needed materials and shipped them to coworkers working from home, students, donors, and other stakeholders. Revenue from value-added services also rose over the past two years from 1% in 2020 to 4% today, indicating an effort by in-plants to expand their services.

Comparing our new survey data with *IPI's* 2020 research, we see increases in a number of the services in-plants offer (Fig. 6 and Fig. 7):

- Contour cutting has shown the most impressive growth of any service, with 35% of in-plants now providing it, up from 26% in 2020 and 16% four years ago.
- Mailing services are now provided by 64% of in-plants, compared with 55% that handled mail in our 2020 study.
- Copier fleet management has grown as a service, from 31% handling it in 2020 to 38% today.
- Installation of wide-format signage is an increasing source of business for in-plants. In 2020, 29% provided this; in 2022, it has grown to 35%.
- Warehousing/fulfillment services increased, for reasons previously stated, from 32% providing them in 2020 to 38% today.

Revenue from Services 8% 8% 61% 14% Digital Printing Mailing/ **Fulfillment** ■ Wide-format Inkjet Printing ■ Design Offset Printing ■ Value-added Services Figure 5 Q: What percent of your revenue comes from the following services?

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Services Provided

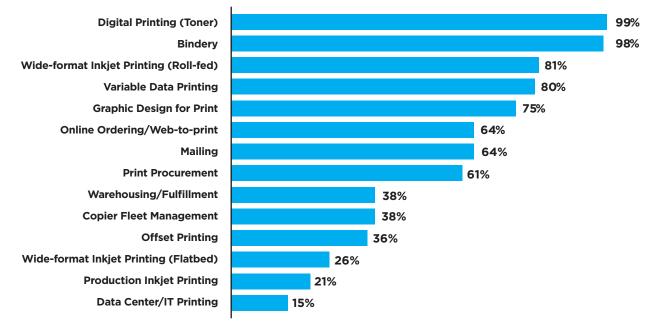


Figure 6 Q: Which of these services does your in-plant provide internally? (Not outsourced.) (Check all that apply.) N=138

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ADDING VALUE

Of the value-added services in-plants provide, the most popular still seems to be scanning for archival purposes (Fig. 7). This allows in-plants to capitalize on the trend toward digitization by adding a service for customers who want to turn their printed documents into digital files.

More than half (52%) say they have been given the responsibility to police all print files for proper use of the organization's logo and branding. This is a crucial responsibility for an in-plant. As the last department to see files before they are printed, the in-plant ensures printed pieces don't go out to the public with inconsistent branding, an error that would require expensive reprinting if not detected.

As noted earlier, graphics installation and contour cutting are growing services. Selling promotional products is also popular and is now being done by a fifth of respondents. More in-plants are adding embellishments (20%) to their printed products than two years ago when 17% did this. Garment printing services have grown only slightly in popularity since 2020, from 11% to 13%.



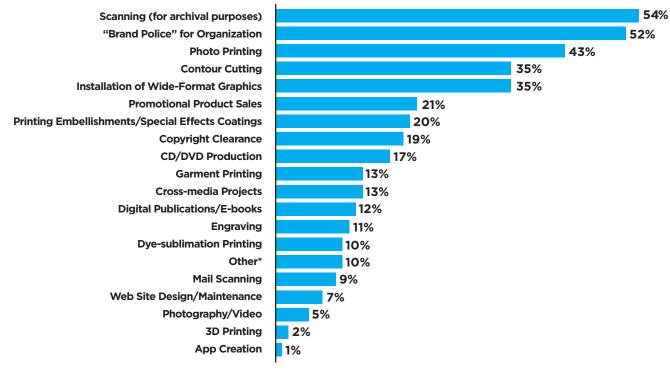


Figure 7 Q: Which of these value-added services does your in-plant provide internally? (Not outsourced) (Check all that apply) N=123

REVENUE GENERATORS

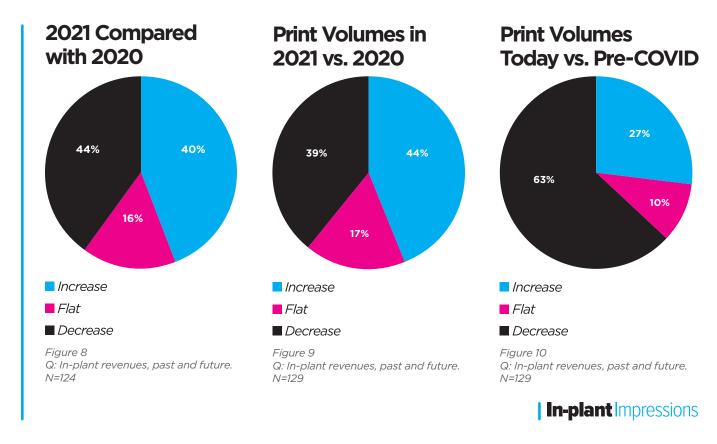
When asked which products and services have proven to be the strongest revenue generators during the pandemic, the most popular response was wide-format printing. In addition to posters and banners, a fair number of respondents singled out rigid signage and yard signs as sturdy revenue sources. Many also specified floor graphics, window clings, and removable wall graphics as popular, lucrative applications.

Other printed products pointed out as great revenue sources during COVID were booklets, classroom materials, workbooks, direct mail pieces, marketing materials, and transactional pieces.

Despite their success with these applications, however, overall revenues were still flat or down for most in-plants in 2021 compared with 2020 (Fig. 8). Though 40% reported they increased revenues last year compared with the first year of the pandemic, even more (44%) said their sales were lower.

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^{*}Embroidery, braille signage, animated digital graphics, diecutting, foil stamping, embossing, vinyl cutting



Looking at print volumes, more in-plants (44%) reported an increase in volume in 2022 over the previous year (Fig. 9). When comparing current print volumes with pre-COVID numbers, however, nearly two-thirds say they are printing fewer pages now (Fig. 10). It is encouraging, though, that 27% are printing more volume today than then did before the pandemic.

The reasons for this growth vary, according to survey respondents, but overall it comes down to this: the more people who have returned to the office or campus, the more printing that's being done. In the organizations where events and activities have resumed, printing for those events has returned.

"Current customers are doing more than before," remarked one manager.

In many cases, the expansion of the parent company or the addition of stores and facilities has brought an increased need for printing.

"We are gaining about 10 hospitals per year," noted one respondent at a busy health care in-plant.

Some universities have stepped up their focus on recruitment materials, which is increasing print volumes for their in-plants. Many K-12 in-plants have seen an uptick in curriculum printing due to the recognition that students learn better from printed instructional materials than from online resources.

"We added additional district-wide curriculum to our print production," affirmed one K-12 manager.

Insourcing work from outside organizations has helped many in-plants grow their revenue. Nonprofits in particular are looking for cheaper printing alternatives, and in-plants are able to provide this. Bringing outsourced work back in-house is also helping shops add volume. In many cases, in-plants have also added business by expanding their services.

"We used the downtime to add bulk mailing, signage, and wide-format installation services," noted one manager.

Other respondents added garment printing, outdoor signage, laminating, scanning, and COVID-related products to boost their business.

Some credited effective promotion of their services with bringing in more work.

"We are working to bring awareness back to the print shop and expand our services," said one respondent.

One reason for revenue increases, though, has nothing to do with rising demand, but instead is all about reduced overhead costs.

"We've become much leaner with labor in the past year," said one manager. Paying less for salaries and benefits due to having fewer employees is making up for lost revenue at many in-plants.

VOLUMES DOWN FOR MANY

The majority of respondents (63%), however, report a decrease in current print volumes compared to the year before COVID. The top three reasons cited by respondents are:

- 1. Fewer events and in-person classes
- 2. Fewer people in the office or on campus
- 3. A shift to electronic communications

"Due to remote or limited onsite staffing, most of our services have an online component, which has reduced the amount of forms or documents printed," explained one manager.

"Classroom materials are rapidly disappearing due to continued remote work and learning environments," said another.

"Print volumes and revenues are declining as our schools are more heavily using the laptops we issued to all students during COVID," noted a respondent.

"Much of our printing was event-based: conference materials, training materials, signage, etc.," explained one manager. "Since the events are not happening, we lose the print revenue."

These pandemic-inspired changes to the working environment are lingering for most in-plants. Also contributing to lower volumes are organization-wide budget cuts, which have reduced customers' ability to order printing, respondents noted. Material shortages are another reason that less printing is being done.

"Supply chain issues, with paper and toner being in short supply, have forced us to reduce the printed matter we send out," said one manager.

Compounding that problem, spiking paper costs have increased the price of printed products, upsetting customers.



"Paper shortages put a bad taste in clients' mouths, spoiling future ventures," said a respondent.

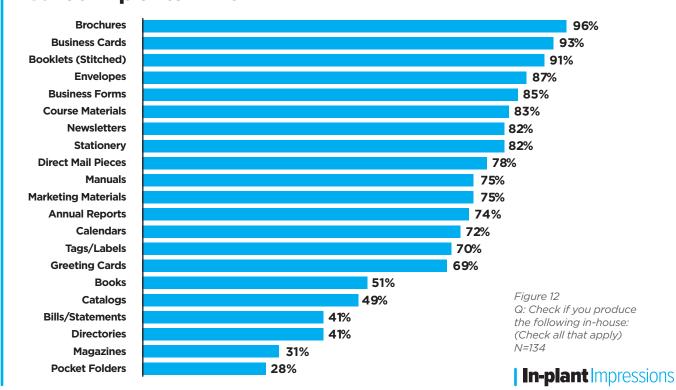
Overall, though, optimism is strong for a profitable 2022, with 56% of in-plants predicting an increase in revenues this year over last, and only 10% expecting a decrease (Fig. 11).

WHAT IN-PLANTS PRINT

When we look at the printed items produced by in-plants (Fig. 12 and Fig. 13), we can see several changes over the past two years, most noticeably in wide-format products, which have climbed the charts in popularity. Floor graphics made the biggest leap, growing 77% since 2020. Today, 62% of in-plant respondents print floor graphics, compared to just 35% two years ago (Fig. 14). The percentage providing wall graphics also climbed, from 52% in 2020 to 61% this year. Window clings and rigid signage grew as well.

Book printing also showed an impressive 31% increase since 2020, with 51% of respondents now printing books versus 39% two years ago. Other printed products now produced by a larger percentage of in-plants are envelopes, bills/statements, catalogs, and direct mail pieces.

What In-plants Print



On the other hand, compared with 2020 data, fewer in-plants are now printing manuals, marketing materials, business forms, tags/labels, and directories (Fig. 14). Additionally, respondents listed other applications that have decreased in demand at their shops: annual reports, course materials, newsletters, banners, brochures, fliers, business cards, stationery, forms, engineering drawings, photo prints, training materials, and point-of-purchase displays.



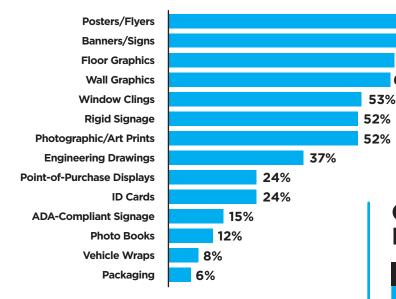


Figure 13 Q: Do you produce these wide-format or niche products? (Check all that apply.) N=124

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BEST PRACTICES

Successful in-plants strive to operate as for-profit businesses. They charge back for their work, compare their costs with competitors, market their services, and consult with customers to ensure their service offerings stay in line with customers' needs.

Despite the pandemic, nearly 80% have upgraded their equipment in the past two years to make sure they are serving their customers with the most up-to-date capabilities (Fig. 15). Fortunately, most (76%) say upper management supports their technology upgrade requests.

Changes in What In-plants Print

62% 61% 95%

92%

PERCENTAGE THAT PRODUCE			
	2022	2020	
Floor Graphics	62%	35%	
Wall Graphics	61%	52%	
Window Clings	53%	46%	
Rigid Signage	52%	49%	
Book Printing	51%	39%	
Envelopes	87%	80%	
Bills/Statements	41%	36%	
Catalogs	49%	46%	
Direct Mail	78%	75%	
Manuals	75%*	84%	
Marketing Materials	75%*	83%	
Business Forms	85%*	90%	
Tags/Labels	70%*	75%	
Directories	41%*	46%	

Figure 14

^{*}Print applications that declined over the past two years.

In-plant Best Practices

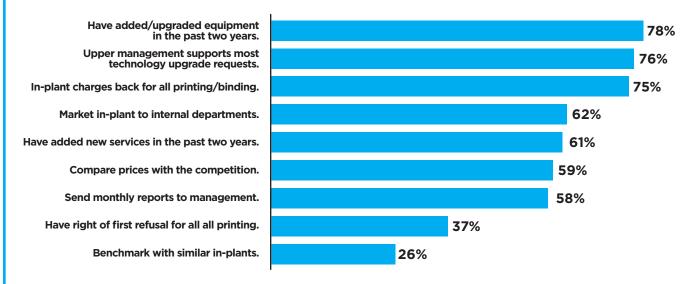


Figure 15 Q: Which of the following apply to your in-plant? (Check all that apply) N=136 In-plant Impressions

Because of their close relationships with their internal clients, in-plants routinely hear about new services their customers need. They are then able to add capabilities to offer these services in-house. Over the past two years, 61% of respondents reported adding new services. Examples include mail scanning, envelope printing, mail inserting, curbside pickup, fulfillment, payroll distribution, inkjet printing, UV printing, diecutting, creasing, and of course wide-format printing.

Looking at services respondents intend to add in the future, wide-format printing is at the top of the list, with some noting plans to buy flatbed printers and contour cutters. Production inkjet presses are also on many in-plant's shopping lists.

Other areas where multiple in-plants see opportunities and plan to add equipment or services are braille printing, dye-sublimation, diecutting, foiling, garment printing, laminating, vinyl cutting, bookletmaking, perfect binding, and business card cutting.

PERCENTAGE OF JOBS OUTSOURCED Average: 5% Median: 3%

Figure 16 Q: What percentage of the jobs that come to your in-plant are outsourced to a vendor? (i.e., Number of outsourced jobs compared with total jobs handled) N=130

By increasing their capabilities, in-plants are able to handle most print work in-house. In fact, in-plants estimate, on average, that only 5% of the jobs they receive are subcontracted out to the private sector (Fig. 16).

In-plants recognize that their products and services need to be competitively priced. By comparing their prices with outside printers, in-plants ensure they are saving their organizations money. They highlight this by sending periodic reports to upper management.

Still, it's rare for parent organizations to mandate all departments send their printing to the in-plant. Just 37% enjoy the right of first refusal for all printing (Fig. 15). Most must compete with outside printers by demonstrating better service, price, and quality. Getting the word out about these advantages is essential, which is why 62% of in-plant respondents market their services internally.

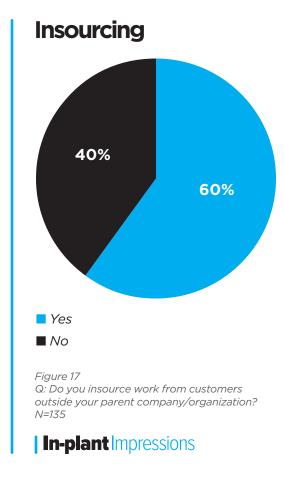
THE INSOURCING STRATEGY

One way in-plants bring in new revenue to support their operations is by insourcing: accepting work from outside the parent organization. Overall, 60% of in-plant respondents report they are now insourcing (Fig. 17). Those that do get an average of 14% of their revenue from insourcing with some getting as much as 60% from external customers.

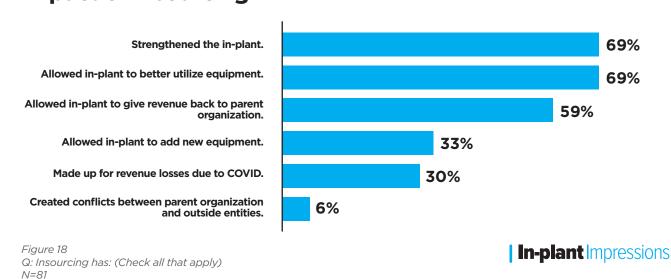
This work comes from a variety of sources. University and school district in-plants are taking in jobs from other educational institutions. State government in-plants are doing work for local municipalities. Nonprofits are a rich source of insourcing work for many in-plants.

This has understandably helped in-plants in many ways; 69% say insourcing has strengthened their in-plants (Fig. 18). This

revenue has allowed 33% to add new equipment, and it has helped make up for revenue losses due to COVID for 30% of those that insource. Nearly 60% are returning a portion of this new revenue to their parent organizations, showing they are not just bringing cost savings, but are generating new revenue.



Impact of Insourcing



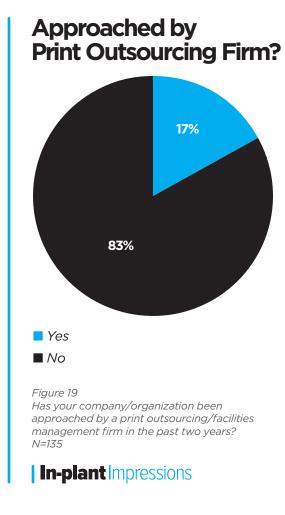
Some say insourcing has brought the parent organization new customers by increasing the visibility of its brand, and also created positive relationships within the community. Though some in-plants that have not yet done any insourcing worry it will create friction between their parent organization and outside entities, just 6% of respondents say this has actually happened.

CHALLENGES ABOUND

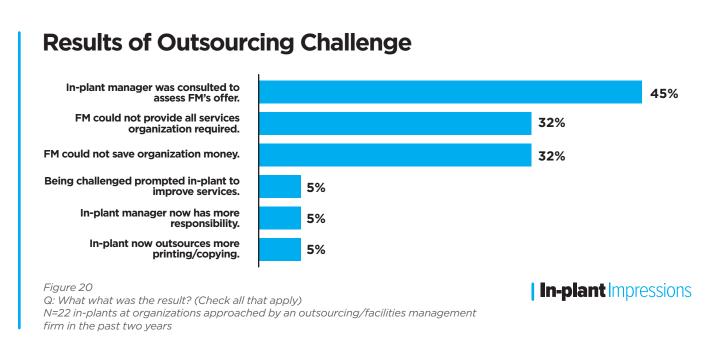
Despite the positive trends, in-plants face numerous challenges as well. Their competitors — commercial printers, facilities management (FM) firms — are relentless in their attempts to pry printing business away.

There are signs, though, that some of these threats are abating. Fewer (15%) listed "defending the in-plant against challenges from outsourcing companies" as one of their top three business concerns this year than in 2020, when 26% had this worry (Fig. 23).

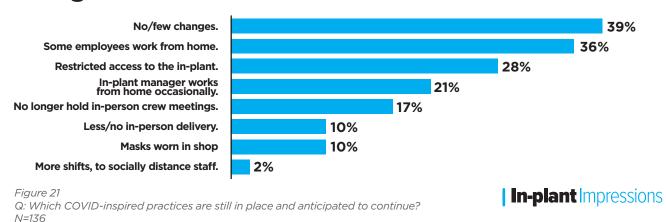
Though outsourcing companies still call on in-plants' parent organizations, they appear to be gaining less of a foothold due to successful efforts by in-plants to promote their value. According to our research, just 17% of in-plants report being approached by FMs in the past two years (Fig. 19). This figure has dropped consistently over the past eight years. In 2020,



23% said they were approached by an FM; in 2018 it was 29%; in 2016 it was 35%; and in 2014 it was 39%.



Changes Due to COVID-19



Of those that were approached by an FM in the past two years, 45% said the in-plant manager was consulted to help assess the FM's proposal. Almost a third said the FM could neither save the organization any money, nor provide all the services needed (Fig. 20). On the other hand, said 5% of respondents, being challenged by the FM prompted the inplant to improve its services.

The Impact of COVID

As if outsourcing challenges weren't enough, in-plants are still faced with the lingering effects of the pandemic (Fig. 21). Though 39% contend things are mostly back to "normal" in their shops, 61% feel otherwise. The biggest change, affecting 36% of respondents, is the number of in-plant employees now working remotely. Designers, customer service staff, even 21% of managers are not in the shop regularly, which can impact productivity.

To continue promoting social distancing, 28% of respondents still restrict access to the in-plant, and 17% have stopped holding in-person crew meetings.

Another way COVID continues to impact in-plants is in the supply chain problems it engendered (Fig. 22). More than half report major problems sourcing paper, toner, and supplies. And nearly a quarter say they cannot find qualified applicants to fill open positions.

SUPPLY AND STAFF ISSUES

Major problems sourcing paper/toner/supplies. 51%

Can't find qualified applicants to fill open positions. 24%

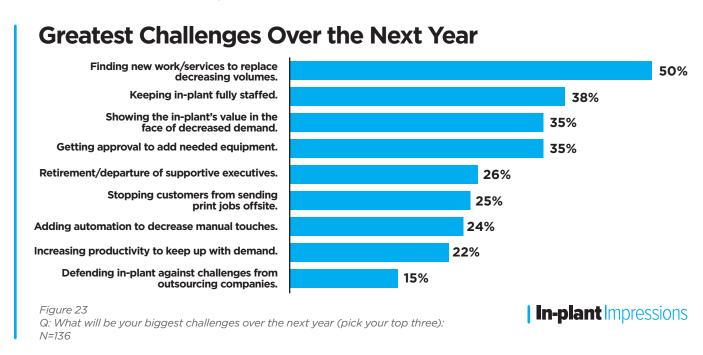
Figure 22 Q: Which of the following apply to your in-plant? (Check all that apply) N=136

Challenges Ahead

In addition to challenges from outside their parent organizations, in-plants face many internal struggles. Chief among them, according to our research, is finding new work and services to replace decreasing volumes (Fig. 23). This is the reason so many are moving enthusiastically into the wideformat printing market. This does, however, put them face-to-face with another challenge: getting approval to add the equipment they need.

Working, as they do, for companies and organizations that are not in the graphic arts business, in-plants can have difficulty convincing their upper management of the benefits that equipment upgrades can bring to the organization. As a result, 35% list this as one of their top three challenges.

In-plants are also constantly challenged to show their value to the parent organization and, similarly, to convince other departments to stop sending print jobs to outside print providers instead of the in-plant. Turnover among their customer base and the retirements of supportive senior executives both contribute to a need to continually market.



Nearly 40% feel that keeping the in-plant fully staffed is one of their top concerns, up from 29% two years ago. This is fueling a growing need for automation, which 24% list as one of their biggest challenges.

Beyond these concerns, respondents also cited a few others:

- Marketing services to a remote workforce.
- Training staff to replace experienced key operators.
- Sourcing stock and supplies.
- Managing the rapid growth of wide-format and specialty printing.

CONCLUSIONS

Despite the impact COVID has had on many in-plants, they have continued to support their parent organizations' printing needs. Their dedication, especially during the worst of the pandemic, was recognized and their organizations have supported them even when their revenues dipped. While the need for some types of printing has decreased due to the pandemic, in-plants have added new services to remain relevant and improve their value.

Mostly self-supported operations, in-plants are run like businesses. Their managers and directors track revenue and productivity while seeking ways to add value and save their parent organizations money.

Though digital printing is their largest revenue generator, wide-format printing has seen tremendous growth over the past two years, spurred to high levels due to the need for COVID safety signage. More than 80% of in-plants now provide this service, and many are looking to expand it further by adding new equipment. Wide-format work makes up 14% of their revenue.

Though COVID robbed in-plants of much of their anticipated growth in 2020, the industry is recovering; 44% report print volumes are up and 40% say revenue is up over 2020 levels. What's more, 56% predict their revenues this year will rise even higher.

Though in-plants continue to face both internal and external challenges, they remain dedicated to their parent organizations' success and are committed to seeking new services they can provide to help their internal clients successfully accomplish their missions.

WHO WE ARE

In-plant Impressions

In-plant Impressions is the only graphic arts magazine written specifically for the in-plant printing industry. Readers know they can trust *In-plant Impressions* to provide up-to-date, insightful articles designed to help them increase productivity, save money and stay competitive. The magazine is supplemented by our website and e-newsletter. IPI also produces videos, webinars and live events and conducts numerous research projects like this one throughout the year to better understand the in-plant market.

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WHO WE ARE

c.p. bourg®

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