



Trends and Services in the In-plant Industry (2020)



In-plant Impressions

 **c.p. bourg**[®]
Your Partner in Print Finishing

Trends and Services in the In-plant Industry

INTRODUCTION

Though their mix of work may have changed considerably over the past decade, today's in-plant printing operations are expanding and upgrading their service offerings to better meet the current needs of their parent organizations. This is one 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.

PROFESSIONALLY RUN BUSINESSES

The survey findings 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 an emergency to help their organizations in a crisis was put to the test when the COVID-19 pandemic threw the world into turmoil.

Companies and organizations with in-plants benefited greatly from the quick production of heavy volumes of COVID-19-related signage and other essential products that their in-plants were able to provide. In-plants at school districts launched into action to print curriculum materials for homebound students; hospital and grocery store in-plants supported their essential parent organizations with signage, floor graphics, labels, information cards, and other critical print pieces; state government in-plants worked overtime to handle the increase in transactional documents related to unemployment benefits and government aid. In-plants truly proved their value when they were needed most.

RESEARCH METHODOLOGY

To better understand the current state of the in-plant market in the United States, C.P. Bourg sponsored this research project. *IPI* conducted a detailed online survey of in-plants using our extensive database in March and early April 2020. We received 154 qualified responses. Most of them arrived before the true impact of COVID-19 became apparent.

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

Respondents by Market Segment

MARKET SEGMENT	NUMBER	PERCENT
College/University	56	33%
School District	30	18%
Government/Military	22	13%
Nonprofit Association	21	12%
Health Care	10	6%
Manufacturing	9	5%
Telecom/Utilities	4	3%
Financial Services/Banking	3	2%
Transportation/Communications	3	2%
Insurance	2	1%
Religious Organization	2	1%
Other*	7	4%

*Includes pharmaceuticals, agriculture, publishing, retail, professional services, gaming, amusement parks

Figure 1
Q. What is the primary business of your parent organization?
n=154



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 an in-plant is 14. This reflects a number of smaller in-plants with one to five employees (53% of respondents fall in this range), as well as several in-plants with more than 40 employees (8% of respondents). The median number of employees in our list of respondents is five.

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 budget figures reported by survey respondents ranged from below \$100,000 at small operations with limited capabilities to \$45 million at one of the largest in-plants. Approximately 41% of respondents had budgets in excess of \$1 million, and 13% had budgets of more than \$5 million. The average operating budget was \$2,905,445 and the median budget was \$847,000.

BUDGET BREAKDOWN

Most of this money goes toward labor expenses, with respondents estimating they spend an average of 35% 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 \$2,905,445, this means in-plants spend an annual average of \$552,035 on equipment, software and supplies.)

It's worth pointing out that 7% 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 53% of all in-plants handle procurement for their organizations.

Supporting the premise that today's in-plants operate like businesses is the fact that the majority charge back for their services; 56% say they are fully or mostly self-supported, with an additional 21% providing "some revenue generation" to offset their costs (Fig. 4).

BUDGET

Average: \$2,905,445

Median: \$847,000

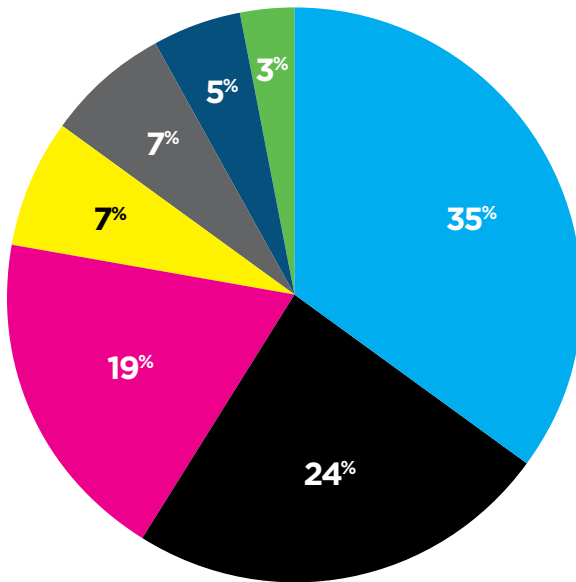
EMPLOYEES

Average: 14

Median: 5

Figure 2

Annual Budget Breakdown

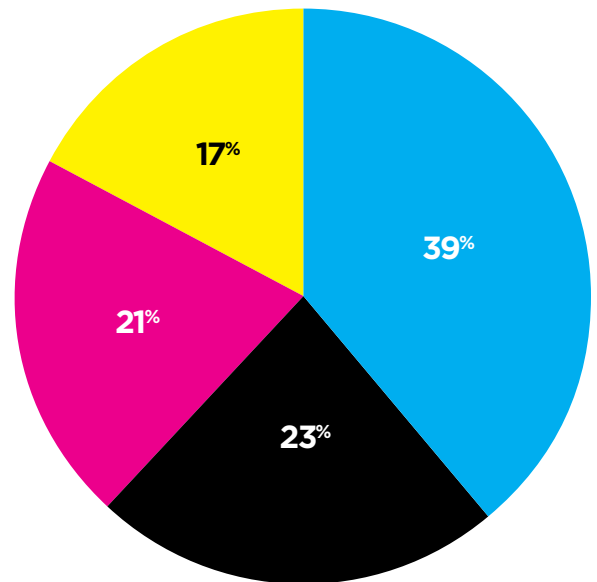


- Labor
- Paper
- Equipment, Software, Supplies
- Procurement (of printing, prepress, bindery services)
- Overhead
- Postage
- Other

Figure 3
Q. Percentage of in-plant budget devoted to the following.
n=105

In-plant Impressions

Self Supported or Funded by Parent Organization?



- Self-supported (charge back)
- Fully funded (by parent)
- Mostly funded, some revenue generation
- Mostly self-supported, some budgeted funds

Figure 4
Q. Which best describes your in-plant?
n=154

In-plant Impressions

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, 97% of in-plants run digital printing equipment, and according to survey respondents it generates the largest percentage of their revenue — an average of 79% (Fig. 5). This is a notable increase from two years ago when in-plants participating in our survey reported digital printing accounted for 61% of their revenue.

That increase has come at the expense of offset printing, which dropped from generating 15% of in-plants' revenue two years ago to just 5% (Fig. 5) in our new study. Also lower is the percentage of in-plants with offset presses. Today, 44% still have offset presses, down from 47% in 2018.

Wide-format printing is a service that continues to grow as in-plants utilize new substrate options to produce ever more innovative applications. Currently, 77% of respondents have wide-format capabilities, and they use them to generate an average of 9% of their revenue. These three capabilities — digital, offset and wide-format printing — are responsible for 93% of in-plants' revenue, on average.

Comparing our new survey data with *IPI's* 2018 in-plant survey, we can see increases in a number of the services in-plants offer.

- Wide-Format printing is now being provided by 77% of in-plants, up impressively from 69% in 2018.
- The number of in-plants providing variable data printing has climbed from 65% to 75% in the past two years.
- Contour cutting has also jumped from 16% of in-plants providing it in 2018 to 26% today.
- Scanning/digitizing documents is done by 59% compared to 51% in 2018.
- Dye-sublimation printing has grown, with 13% handling it today, up from 10% in 2018.
- And more in-plants are providing online ordering/Web-to-print services (59%) today than two years ago (53%).

Revenue from Services

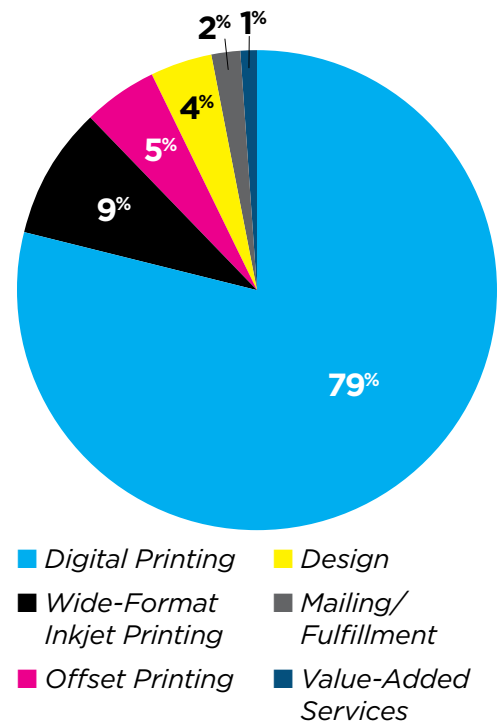


Figure 5
Q. What percent of your revenue comes from the following services?
n=125

In-plant Impressions

Services Provided

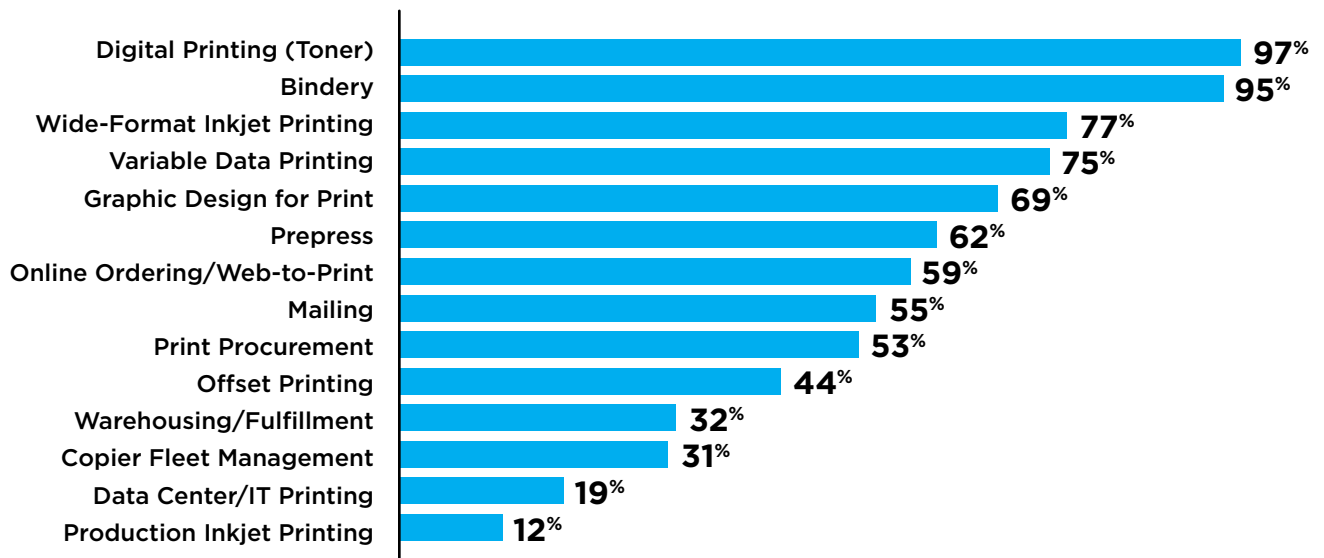


Figure 6
Q. Which of these services does your in-plant provide internally? (Not outsourced.)
n=154

In-plant Impressions

ADDING VALUE

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

Nearly half (47%) 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 that printed pieces don’t go out to the public with inconsistent branding, an error that would require expensive reprinting if not detected.

One growing value-added service is installing the wall and window graphics being printed with the in-plant’s wide-format equipment. Almost 30% handle this installation themselves, which not only saves money over the cost of hiring outside installers but gives the in-plant considerable visibility in the organization, driving new business.

Services Provided

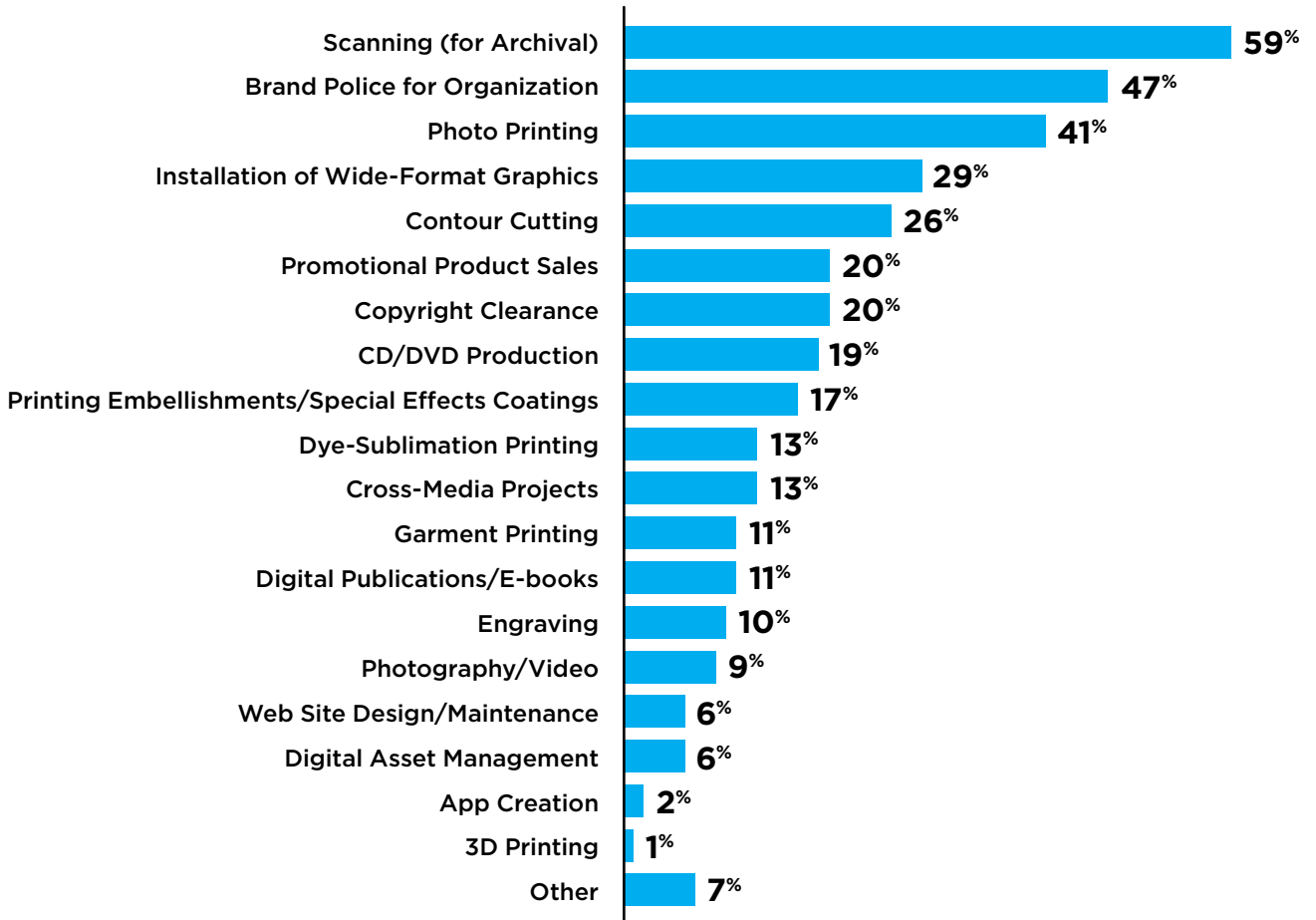


Figure 7
Q. Which of these value-added services does your in-plant provide internally? (Not outsourced)
n=136

When we asked in-plants about products and services they planned to add in the future, wide-format capabilities were the top area of planned expansion. Respondents expect to add flatbed printers to produce rigid signage, along with contour cutters and laminators. They're looking to expand into vehicle graphics, window clings, floor graphics and many other applications.

Other areas of expansion include dye-sublimation, direct-to-garment printing, embroidery, laser engraving, and promotional product sales. They see a need for printing magnets, mugs, name tags, ID cards, plaques and other specialty items.

Many plan to expand their in-house binding capabilities to include perfect binding, punching, padding, coil binding, in-line folding and inserting. New finishing techniques like spot UV coating, foiling, and laminating are on their radar as well.

WHAT IN-PLANTS PRINT

When we look at the printed items produced by in-plants (Fig. 8), we can see several changes over the past two years, most noticeably in wide-format products, which have climbed the charts in popularity. Banner and sign production are now done by 90% of in-plants, compared to 78% in 2018. Other applications that have grown in popularity are marketing materials, direct mail, business cards, stationery, greeting cards, catalogs, and tags/labels.

What In-plants Print

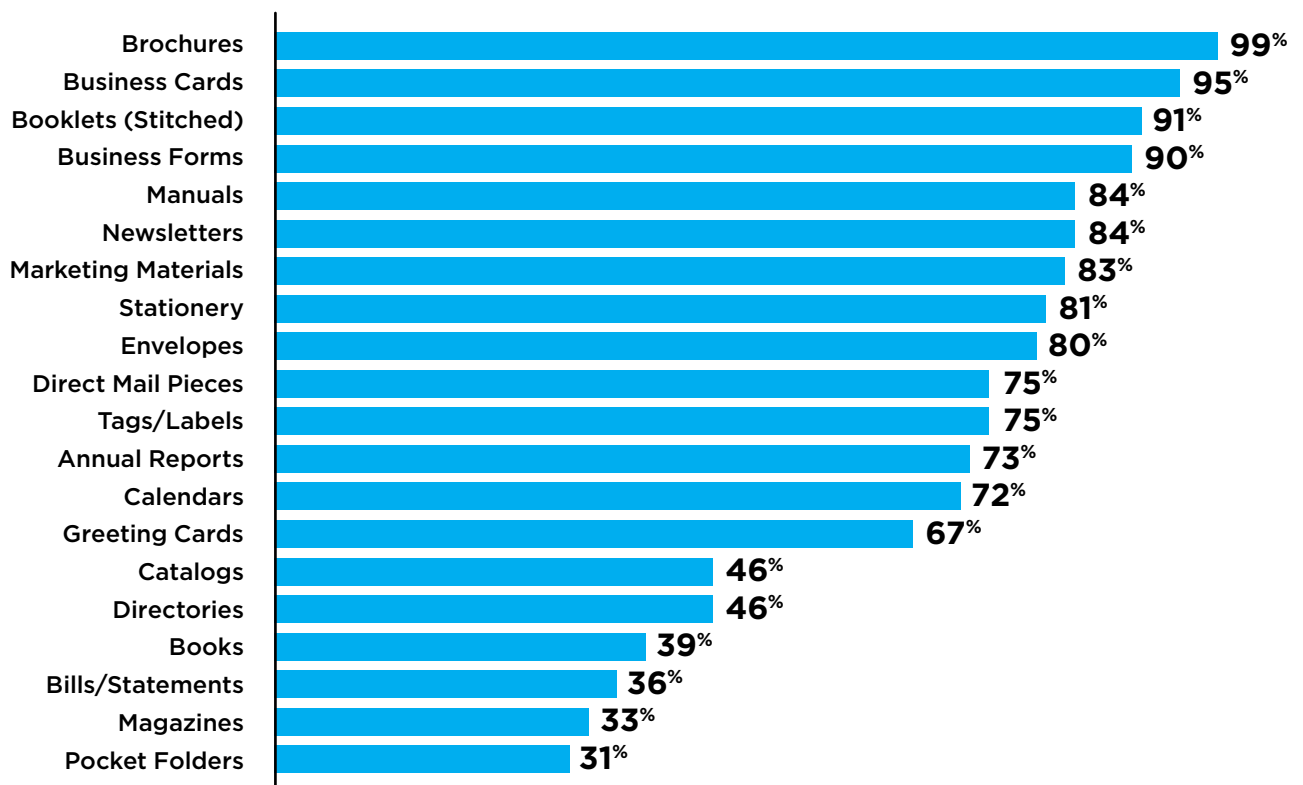


Figure 8
Q. Check if you produce the following in-house:
n=144

Wide-format printing has been a profitable venture for all in-plants that have added or expanded this service. The introduction of new substrates lets in-plants offer applications they hadn't dreamed of several years ago, and the demand for these products continues to grow. New flatbed and hybrid printers enable in-plants to print on rigid substrates, opening a whole new line of business.

"The major business increase has been in wide-format; traditional print has remained flat," revealed one survey respondent.

Wide-Format and Niche Products

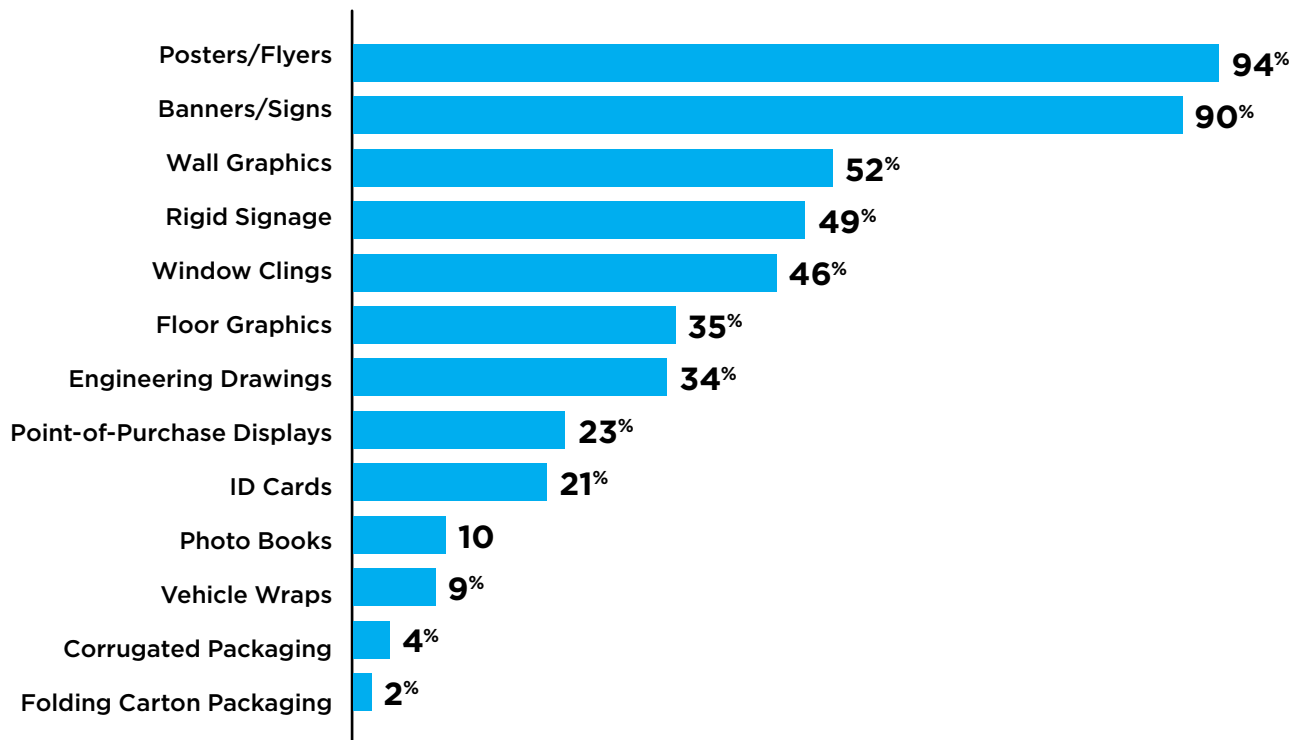


Figure 9
Q. Do you produce these wide-format, packaging or niche products?
n=124

In-plant Impressions

REVENUE IS RISING

One of the key findings of our new research is that overall, in-plant revenue has continued to rise. Though most responded to our survey before the COVID-19 pandemic, almost half reported that 2019 revenue had increased compared with 2018 revenue. Similarly, print volumes rose at more than half of respondents' in-plants compared with a year ago (Fig. 10).

The reasons for this growth vary, according to survey respondents. Some of the actions they say they have taken to stimulate growth include adding equipment and services (particularly wide-format equipment), increasing their internal marketing, and insourcing additional work from outside the organization. This last initiative was cited numerous times. Overall, 56% of in-plants are insourcing print jobs (Fig. 14).

In addition to bringing in external work, in-plants are making a renewed effort to capture internal work that is going offsite or that customers are printing on their own devices:

“We are shifting larger-volume print jobs to the print center that were previously done on an office copier,” remarked one manager.

“We’ve seen an increase in users ordering through us instead of doing it on their own,” added another.

The addition of new capabilities has been a prime reason for revenue and volume growth.

“We added capabilities and also started selling promotional items,” noted one manager to explain his in-plant’s revenue growth.

“We’ve added new services,” reported another. “Also there’s been a switch in production; more color, for a higher profit margin, and less black-and-white printing.”

“We expanded our offerings, primarily into the large-format arena,” added a third manager, summing up the words of many.

Sometimes just adjusting and updating pricing has brought revenue increases.

“We took a real hard look at the overall pricing,” explained one manager. “It had not been updated to account for new equipment charges.”

“We’ve also adjusted billing to more accurately cover our costs,” added another.

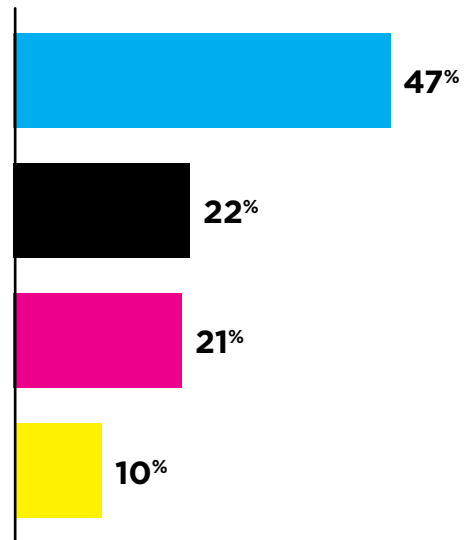
In some cases, changes to the needs of the parent organization have brought more opportunities to in-plants.

“The university is stepping up its recruitment. This drives a lot of what we do, and almost all of the print we do for this is variable data,” noted one higher-ed in-plant manager.

In-plants also said that adding inkjet, Web-to-print, finishing and fulfillment capabilities has contributed to their revenue increases.

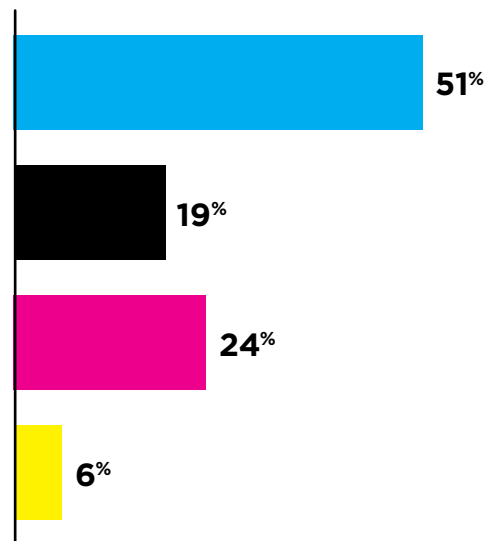
Revenue and Volume

2019 REVENUE COMPARED WITH 2018



n=152

PRINT VOLUMES: 2019 VS. 2018



n=148

■ Increase ■ Decrease
 ■ Flat ■ Not Tracked

Figure 10
 Q. 2019 compared with 2018.

In-plant Impressions

ON THE OTHER HAND...

Not all of the trends are positive, though. Nearly a quarter (24%) reported a decrease in print volumes compared with 2018 (Fig. 10). Organization-wide budget cuts reduced customers' ability to order printing, respondents noted, driving some of that work online. Many reported that the migration of forms online is eroding a traditional source of in-plant work. Higher-ed and K-12 in-plants pointed out that the replacement of printed educational materials with online resources has hurt their business.

"Students are moving to Chromebooks," reported one school district in-plant manager. "Less printing is needed."

Though most respondents replied to our survey before the impact of COVID-19 was felt, a few respondents put the pandemic's influence on their operations in perspective:

"We were on track for a 2020 increase, but COVID-19 is resulting in a flat year or even a potential decrease in revenue," remarked one university in-plant manager.

"Until the Coronavirus, we were increasing our printing output; now, nothing is happening except mail," echoed another.

BEST PRACTICES

Successful in-plants strive to operate as for-profit businesses. They charge back for their work, market their services, compare their costs with competitors and consult with customers to ensure their service offerings stay in line with customers' needs. Nearly 80% have upgraded equipment in the past two years to make sure they are serving their customers with the most up-to-date capabilities (Fig. 12). Fortunately, most (72%) say upper management supports their technology upgrade requests.

Because of their close relationships with their internal customers, 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, 67% of respondents reported adding new services. This increase in capabilities enables them to handle most print work in-house. In fact, in-plants estimate, on average, that only 6% of the jobs they receive are subcontracted out to the private sector (Fig. 11).

**PERCENTAGE
OF JOBS
OUTSOURCED:**

AVERAGE: 6%

MEDIAN: 3%

Figure 11
Q. What percentage of the jobs that come to your in-plant are outsourced to a vendor?
n=140

Nevertheless, 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. 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 65% of in-plant respondents market their services internally.

In-plant Best Practices

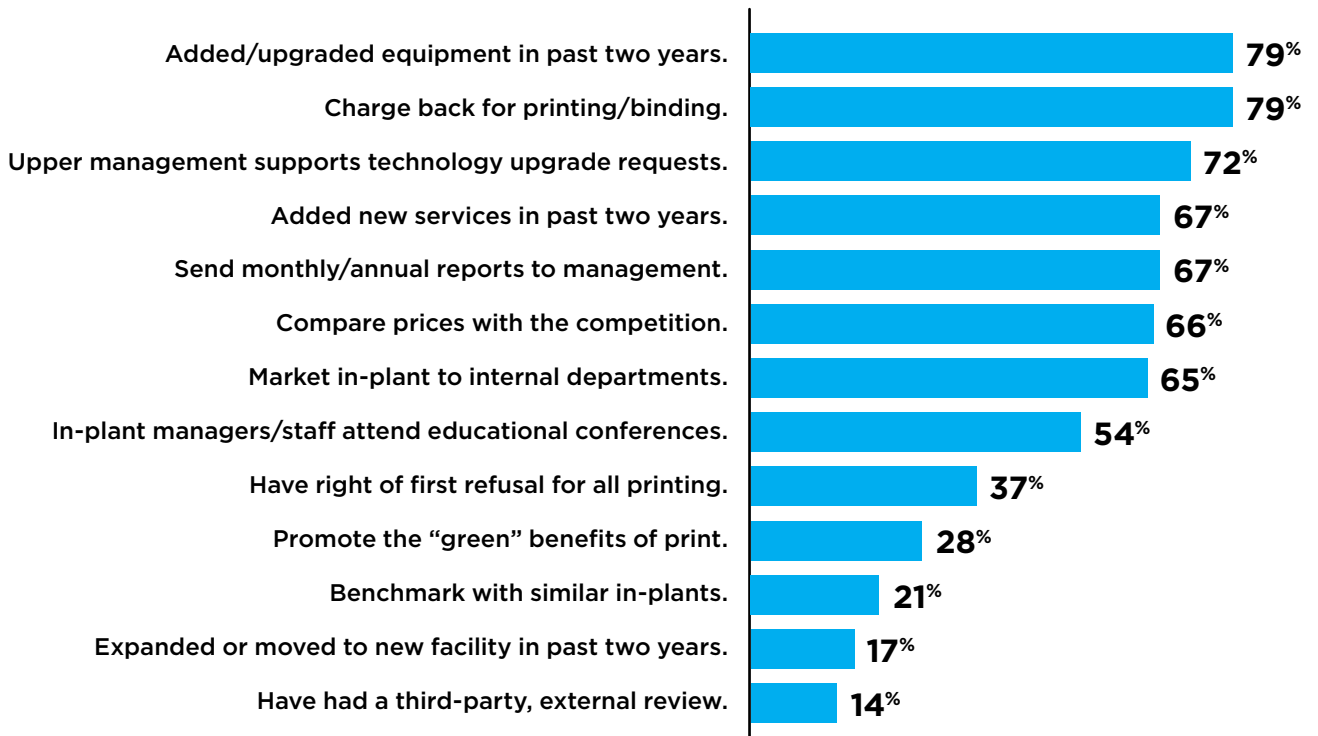


Figure 12
Q. Which of the following apply to your in-plant?
n=145

In-plantImpressions

PROMOTIONAL EFFORTS

Though most in-plants aren't permitted to spend money to advertise the way commercial printers do, they have found creative ways to promote themselves within their organizations.

"We have created a customer experience plan and a marketing plan that have been implemented and include monthly marketing blasts with a companion printed piece that is handed out with orders," explained one manager.

"We offer tours to all new employees, and have an open house once a year," added another.

"We just participated in an event where different departments and brands promote their area," noted a third. "We had a booth, showed new products, handed out a brochure, and signed 37 people up for a tour of Print Services."

To market themselves, survey respondents report that they:

- Place articles in corporate newsletters promoting their successes;
- Survey customers and share the results;
- Hold focus groups, design classes and other instructional sessions for customers;
- Build relationships by joining internal committees and groups;
- Hand out brochures listing their capabilities.

“Each package/box that goes out our doors has a Print Shop marketing piece included,” said a manager.

Meeting with customers regularly to ask about their needs and offer ideas for new print pieces is a common promotional effort.

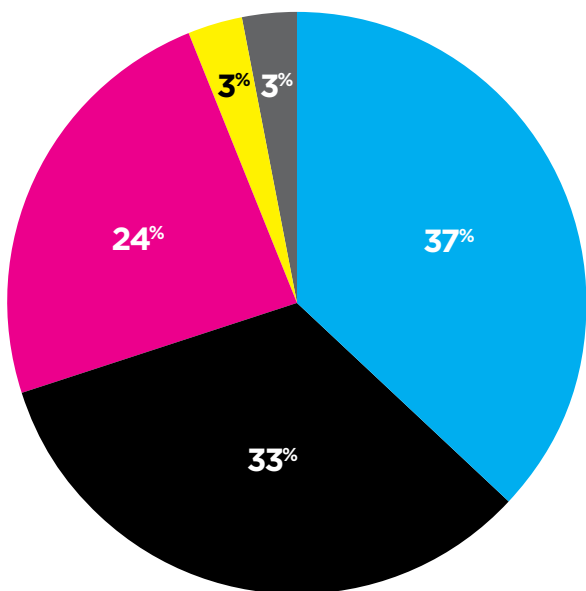
“I have been visiting each of the departments in the building, and also going out to visit any offsite department/division at least once a month,” reported one manager.

Just providing stellar service is a great promotional tool as well.

“I always remind them when they send a rush job, that they couldn’t get it done that fast outside,” noted one manager.

With all these efforts to prove their value, it’s no wonder that 70% of in-plants feel they are well respected or highly valued by their upper management (Fig. 13), with most internal customers choosing to send their print work to the in-plant.

Value to the Organization



- *Highly valued. The organization relies heavily on us.*
- *Well respected. Most work comes to us.*
- *Good awareness of our services, but some don't use us.*
- *We are often overlooked. Lots of work goes outside.*
- *We worry constantly that we will be closed.*

Figure 13
Q. How much is your in-plant valued by upper management?
n=147

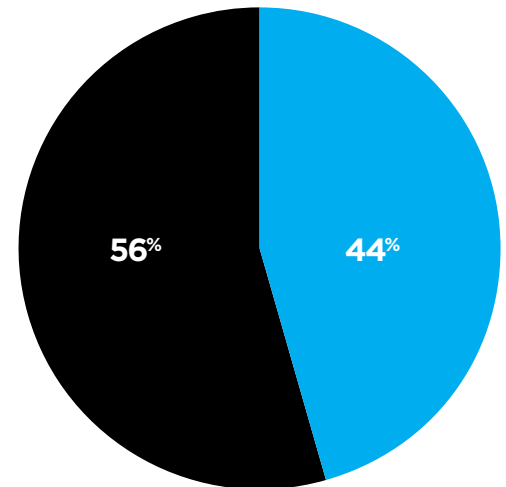
THE INSOURCING STRATEGY

One way in-plants bring in new revenue to support their operations is by insourcing: accepting work from outside the parent organization. Overall, 56% of in-plants are now insourcing (Fig. 14). They get this work 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; 57% say insourcing has strengthened their in-plants (Fig. 15). This revenue has allowed 33% to add new equipment and 15% to add new employees. 63% 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. Some say insourcing has brought the parent organization new customers and created positive relationships within the surrounding community.

Though some in-plants that have not yet done any insourcing worry it will create friction between their parent organization and local printers, just 6% of respondents say this has actually happened.

Insourcing



■ Yes
■ No

Figure 14
Q. Do you insource work from customers outside your parent company/organization?
n=146

In-plant Impressions

Benefits (and Pitfalls) of Insourcing

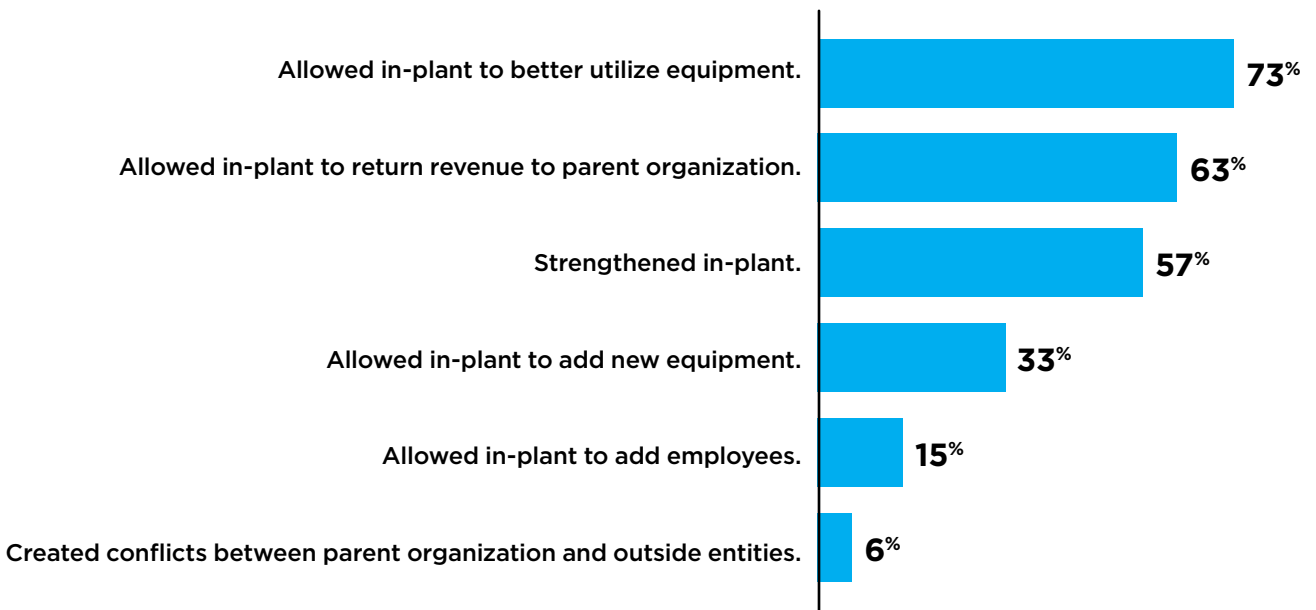


Figure 15
Q. Insourcing has: (Check all that apply)
n=80

In-plant Impressions

CHALLENGES ABOUND

Despite the positive trends, in-plants face many 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 (26%) listed “defending the in-plant against challenges from outsourcing companies” as one of their top three business concerns this year than in 2018, when 32% had this worry (Fig. 18).

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 23% of in-plants report being approached by FMs in the past two years (Fig. 16). This figure has dropped consistently over the past six years. In 2018, 29% said they were approached by an FM; in 2016 it was 35%; in 2014 it was 39%. Of those that were approached by an FM in the past two years, 52% said the FM could not save the organization any money, and 45% said the FM could not provide all the services needed (Fig. 17). On the other hand, said 10% of respondents, being challenged by the FM prompted the in-plant to improve its services.

Approached by Print Outsourcing Firm?

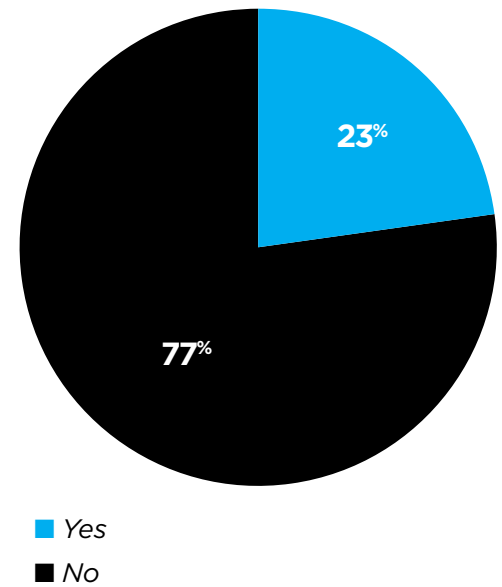
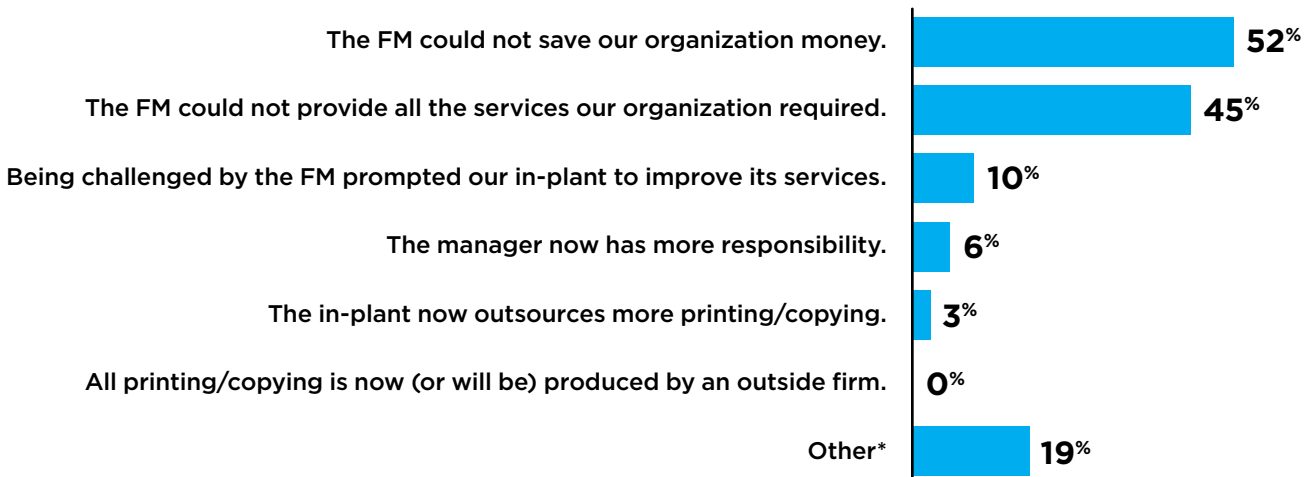


Figure 16
Q. Has your company/organization been approached by a print outsourcing/facilities management firm in the past two years?
n=146

In-plant Impressions

Results of Outsourcing Challenge



* Provided data on volumes, never heard back; still under review; outsourcing only jobs in-plant can't produce

Figure 17
Q. What was the result?
n=31

In-plant Impressions

In addition to challenges from outside the organization, in-plants face a number of internal struggles. Chief among them, according to our research, is finding new work to replace decreasing volumes (Fig. 18). This is the reason so many are moving enthusiastically into the wide-format printing market. This does, however, put them face-to-face with their second biggest 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, 38% list this as one of their top three challenges (though interestingly, 72% [Fig. 12] say most equipment upgrade requests are supported by upper management).

In-plants are also constantly challenged to prove their value to the parent organization and, similarly, to convince other departments to stop sending print jobs to outside printers 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, something that 65% of respondents already do.

Greatest Challenges Over the Next Year



*Outgrowing our current space; need for loading dock and storage facility; finding skilled labor; losing employees whose salaries are at the top of their range; bringing in the printing from IT/data center; increasing efficiency and doing more with less; keeping up with demand with a small staff; transitioning to a new job ordering system; performing to a budget that hasn't increased at the rate of our growth; making sure other staff use company branding.

Fig. 18

Q. What do you think will be your biggest challenges over the next year (pick your top three)?
n=145

In-plant Impressions

Beyond the productivity, staffing and revenue concerns that in-plants share with their peers in the commercial printing industry, in-plants cite other challenges:

- Lack of space in the facility.
- The need for a loading dock and warehouse.
- Budgets that haven't increased to match their rate of growth.
- The need to increase efficiency to be able to do more with fewer employees.
- Transitioning to an online ordering system.
- Monitoring the correct usage of company branding in printed materials.

CONCLUSIONS

Though rarely visible to the public, the in-plant industry is flourishing. Its directors and managers run their operations like businesses, tracking revenue and productivity while seeking ways to add value and save their parent organizations money. They provide a range of print-related services, with digital printing being the largest revenue generator. Wide-format printing continues to grow, with nearly 80% of in-plants offering this service, and many looking to expand it further with new equipment acquisitions.

Though COVID-19 has altered many optimistic outlooks, growth trends have been positive, with 2019 revenue and print volumes up compared with 2018 figures. In-plants continue to seek new value-added services to add to their mix of capabilities.

Though in-plants continue to have 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.

Visit InPlantImpressions.com

WHO WE ARE



c.p. bourg®

Your Partner in Print Finishing

Since 1960, **C.P. Bourg** has designed and delivered innovative finishing solutions for the global printing industry. C.P. Bourg's reputation as a world-leading technology developer and supplier of in-line and off-line sheet feeding, stacking, binding and booklet-making equipment for both the traditional and digital print environments is built on a history of achievement and continuous commitment to quality, innovation, and efficiency. This commitment has led to privileged partnerships with elite digital press manufacturers and thousands of customers worldwide.

Visit www.cpbourg.com

WHO WE ARE



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.

NAPCO Research can help with:

- Business goal prioritization
- Opportunity discovery
- Market segmentation
- Landscape insight
- User needs and wants
- Product features and functionality
- Content marketing strategy
- Sales strategy and tactics
- Market conditions
- Benchmarking
- Industry trends
- Brand awareness

Contact research@napco.com to talk with our analysts to find out how we can help you with your research needs.