Convergence in the Print Industry:

UNDERSTANDING GROWTH OPPORTUNITIES AND COMPETITION

SGIA

PRINTINGUNITED powered by NAPCO RESEARCH

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INTRODUCTION:
Shifting Dynamics Across Print Segments

Printers are faced with an ongoing challenge to maintain and grow their business in the face of new and competing technologies, new competitors, changing market dynamics, shifting customer demands, and other factors. These realities are impacting the types and run lengths of the printed products and related services they offer and have pushed the industry to evolve in new ways. To address these challenges, printers not only add new technologies to enhance their competitiveness with existing customers, but also can extend their overall offerings to both new and existing clients by migrating into other print segments that expand their overall capability.

Anecdotally, there have been reports of migration by printers into adjacent areas within their own segment (e.g., a packaging printer who expands into flexible package printing) and into entirely new segments (e.g., a commercial printer who expands to offer packaging services, a graphics and sign producer who invests in commercial printing equipment to provide commercial printing solutions). However, until now, there has not been a concerted effort to measure the degree to which it is or is not occurring and the actual migration paths from one segment to another.

The Specialty Graphic Imaging Association (SGIA), an industrial, graphic, garment, textile, electronics, packaging and commercial printing nonprofit association, in conjunction with NAPCO Media, a business-to-business media company, commissioned this study to measure the level of print migration occurring and to detail those migration paths across various print and market segments.

The study, conducted by NAPCO Research, evaluated the degree to which printers are expanding their service offerings across six different printing industry segments:

- Commercial Printer/Publication
- Graphics and Sign Producer
- In-Plant Printer
- Garment Decorator
- Packager/Converter (Label, Folding Carton, Flexible, Corrugated)
- Industrial Printer (including Printed Electronics)

In January 2018, respondents from each of the segments completed an online survey. Nearly 500 printers across these segments completed the survey, and follow up telephone interviews were conducted with respondents from the segments to allow for qualitative analysis alongside the quantitative data. The table below depicts the completed surveys and telephone interviews across the various market segments.

In this study, package printing was examined in two ways due to the diverse nature of the segment. For printers interested in migrating into Packaging, each of four primary Packaging applications were examined — label, folding carton, flexible and corrugated. For package printers interested in migrating into other segments, Packaging and its collective applications were reported on as a single Packaging group. Industrial printing was reported as a "to" group but not as a "from" group; in that printers interested in migrating into Industrial printing were included, but Industrial printers interested in migrating into other segments were not included due to a small number of respondents.

SEGMENT	SURVEYS	INTERVIEWS
Commercial	172	3
Graphics	107	2
In-Plant	69	3
Garment	63	3
Packaging	48	3
Industrial	11	0
Total	**470**	**14**

EXECUTIVE SUMMARY

Printers clearly identified an opportunity to better serve their customers with services outside of their current primary offering(s), with 95% reporting there is opportunity for expansion within their own businesses, and 93% saying they believe expansion is happening within the industry as a whole.

The expansion opportunities printers are exploring include both services within and outside their primary segment. Printers see significant growth occurring in their primary segment as they expand their application and/or service offerings, and engage in cross-segment migration, although many are studying the issue carefully over time.

Across segments, the most significant expansion is occurring from the Commercial Printing segment to other market segments, chief among them, Packaging and Graphics and Signage. The second most significant expansion is occurring in the Garment Decoration segment with the primary destinations being the Commercial Printing and Graphics and Signage markets.

Additional expansion into other market segments also will occur via mergers and acquisitions, with 38% planning a merger and/or acquisition in the next five years. To support the ongoing M&A process in which printers gradually expand into adjacent areas — either organically or via M&A activity — 80% of the survey respondents feel a consolidated all-encompassing industry trade show event would serve the industry better than segment-specific events.

95% OF PRINTERS Across Segments
See Opportunity for their Own Expansion

Printers in all segments see an opportunity to better serve their customers by providing services other than what they currently provide — an overwhelming 95% believe this. This significant finding includes the 33% of printers who have already expanded or are actively taking steps to do so, the 39% who are actively researching an opportunity, and the 23% who believe there is an opportunity but have not yet researched it. Results are similar across all segments and tightly clustered with all above 90%. Segment level results included: Commercial at 95%, Graphics and Signage at 93%, Packaging at 94%, Garments at 94% and In-Plant at 97%.

Opportunity for Expansion

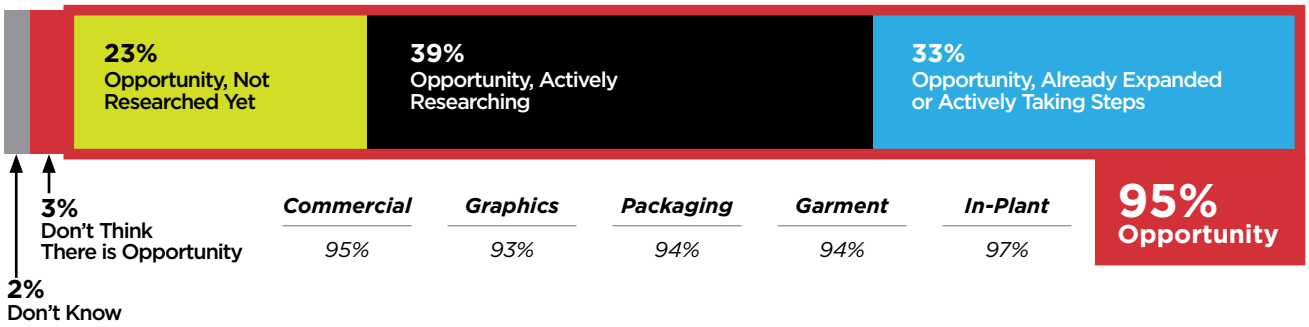

Figure 1
Q: What best describes the opportunity to better serve your customers with services other than you currently provide? (n=470)

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This data signals both an active migration process is occurring between various print market segments and a latent desire for migration that likely predicts future activity. This suggests an industry in an ongoing state of flux, given that some businesses have already migrated, some are in the midst of an active migration process, and some have future plans to migrate.

Printer observations in phone interviews across segments reflected drivers for migration as a need to evolve with changing market conditions, the necessity to grow revenue in the long term and the requirement to meet changing consumer expectations.

Interviewee Observations:

BUSINESS FORCES DRIVING MIGRATION

- Those delivering value are the ones that grow and get the opportunities. (Gregg Ockun, Hammer Packaging)/Packaging Segment
- Printers are looking for where their next sales are coming from and what segment their next sales will be in. (Billy Bogue, All Color Printers)/Commercial Segment
- Everyone's trying to make sure they're relevant. The more revenue strings you have, the less impact a downturn will have [on your business]. (Tammy Golden, State of Tennessee)/In-Plant Segment
- If you can't migrate to new platforms, you won't be successful. (Graphics and Signage Segment)
- Anyone migrating is investing and anyone not migrating is not investing. (Lou Lovoli, Hammer Packaging)/Packaging Segment

MARKET FORCES DRIVING MIGRATION

- People are becoming increasingly impatient; they want everything right away, instant gratification, and one-stop shopping, because of Amazon. If you don't offer what customers want, others will. (Chris Urbach, The Printed Image)/Garment Segment
- We're constantly being asked about other services, so it's natural to add them so we can better serve our customers and get a competitive edge. (Jessica Johnson, Production Creek Screen-Print & Embroidery)/Garment Segment

ADVICE FOR PRINTERS INVESTING IN PRODUCT MIGRATION

- The most common mistake is not investigating the return on investment. Some of my competitors have not done well because they've made that mistake. (Wayne Angstrom, Angstrom Printers)/Commercial Segment
- If you're a commercial printer and want to play in the flexible package printing world, you better hire people with flexible packaging experience. Otherwise, the learning curve is going to be huge. Even what may seem a simple category like label printing, is not at all simple. (Packaging Segment Printer)

93% OF PRINTERS Think Migration is Occurring in the Industry as a Whole

In addition to believing there is opportunity for expansion within their own businesses, 93% of the survey respondents believe expansion into other market segments is occurring throughout the printing industry as a whole — with 66% saying some expansion is occurring and more than a quarter (27%) — saying a significant amount of expansion is occurring.

The results are similar at the market segment levels: Commercial at 91%, Graphics and Signage at 94%, Packaging at 94%, Garments at 96% and In-Plant at 97%.

This data — more than 9 out of 10 printers who believe segment expansion is occurring — tell us the perception throughout the industry is that the migration and convergence crossover into new products and services will continue to occur in significant ways across all printer segments. The traditional distinctions that had separated different types of printers will continue to blur as printers seek to expand into additional, and potentially more profitable, product and service offerings.

Degree of Expansion

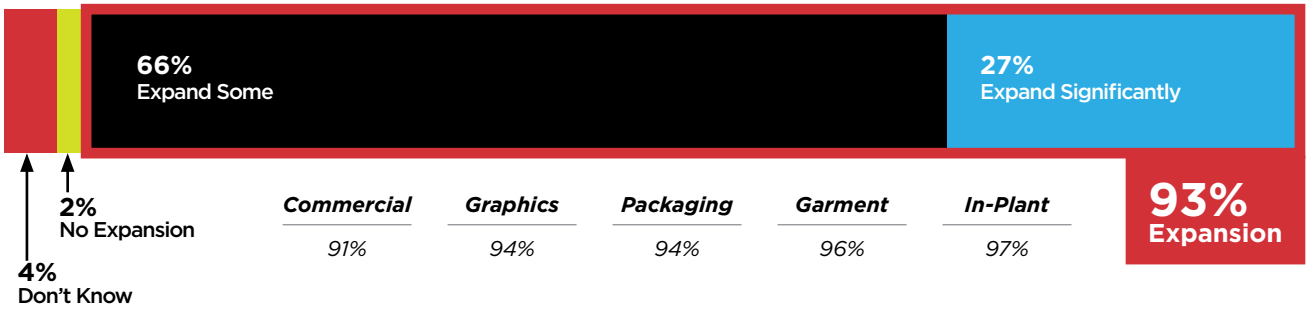

Figure 2
Q: What is your perception of the degree that printers are/are not expanding into new segments beyond their primary business? (n=470)

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Interviewee Observations:

- Expansion is definitely occurring quite a bit. Seems to be fast and furious. Amazing how things have transformed in the last three years. (Arne Larsen, City of Billingham Washington)/Graphics and Signage Segment
- I've seen changes for five years. Branching out, lets you offer more and gives you more options to sell. Customers are ordering one thing and are interested in something else too. (Jennie Livezey, It's a Z Shirt)/Garment Segment

81% OF PRINTERS Believe the Rate of Expansion Will Accelerate Over the Next Five Years

When asked their perception of the rate at which expansion will or will not occur in the next five years, 8 out of 10 (81%) respondents said they expected it to accelerate, with more than half (53%) saying the acceleration will be significant. This suggests printers believe the current migration trends are not reflective of immediate market conditions, but signal an ongoing expansion/migration trend that will continue to grow over time.

The greatest perception of the rate of expansion was in the Packaging industry at 92%, with the other segments clustered around 80% (Commercial: 79%, Graphics & Sign: 82%, Garment: 79%, and In-Plant: 78%).

Rate of Expansion

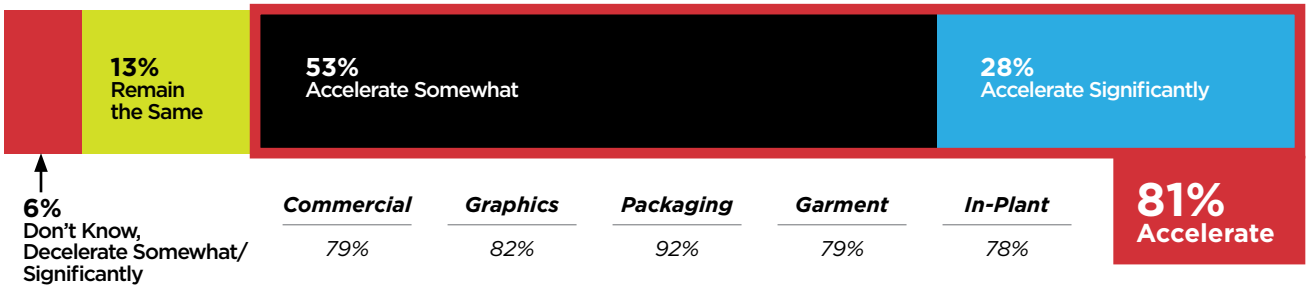

Figure 3
Q: What is your perception of the rate that expansion will/will not occur over the next five years? (n=470)

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Interviewee Observations:

- I absolutely believe migration will accelerate. (Wayne Angstrom, Angstrom Printers)/ Commercial Segment
- We have to stay up-to-date with technology, stay diverse and be able to accommodate client needs. If we're able to do more and provide more to customers, we'll thrive — or at least survive. (Nathan Thole, Iowa State University)/In-Plant Segment

MOST SIGNIFICANT CROSSOVER MIGRATION
Is Occuring Within the Commercial and Graphics and Signage Segments

By asking printers the segments beyond their own that they plan to enter or are researching entering, we can gain a clearer picture of planned migration patterns across segments. This figure (next page) depicts segment migration patterns with "Current Primary Segments" in the five columns and "Target Segment/Applications" in the eight rows. Package Printing is broken out in the "Target" rows by its four primary applications (Label, Folding Carton, Flexible, and Corrugated) and is reported as a single column in a "Current Primary Segment."

The Industrial Printing segment is represented in a "Target" row, to identify the interest level that other segments may have in migrating to this segment but is not plotted as a "Current Primary Segment" column due to the limited number of responses. Also, the In-Plant segment doesn't have a "Target" row, because In-Plants support a parent organization; however, In-Plant was plotted as a "Current" segment column to identify the interest they may have in considering and/or researching additional services for their organization or expanding into offering services to others outside of their organization.

Segments Considering and/or Researching

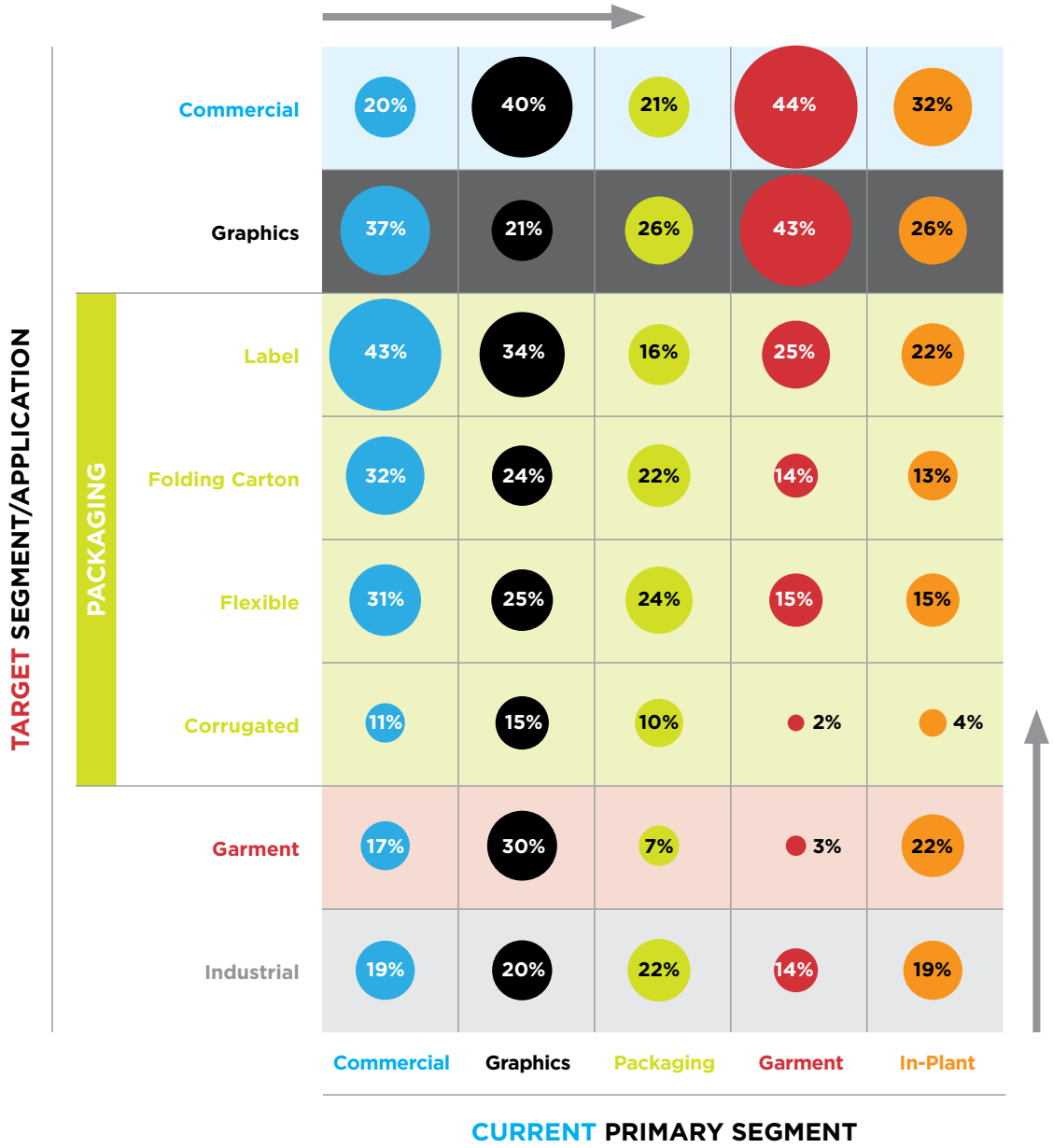

Figure 4
Q: What market segment(s) has your organization considered or researched entering?

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The size of each bubble in the plot corresponds to the percentage interest the Current Primary Segment expressed in each of the Target Segment/Applications.

The colors in the figure are used to enhance its readability. For example, blue represents the Commercial Printing segment, with all bubbles in the Commercial "Current Primary Segment" column colored blue and the background of the Commercial "Target Segment/Application" row colored blue. Using color this way, readers are able to more readily see when segments are considering and/or researching expansion within their current primary segment (when the bubble and the background color are the same) or across into other application segments (when the bubble and background colors are different).

To illustrate this, 20% of Commercial printers are considering and/or researching expanding their offerings within the Commercial segment — where a 20% blue bubble in the upper left corner of the figure is against a blue background. In contrast, 34% of Graphics and Signage printers are considering and/or researching the expansion of their current offerings in the Label application of the Packaging Segment —where the 34% black bubble in the third row down from the top of the figure is against a green background.

Overall, the figure shows the highest Target Segment/Application interest (where most of the larger bubbles are) within the Commercial, Graphics and Signage, and Packaging's Label printing applications. The next highest interest is in Packaging's Folding Carton and Flexible Packaging applications, and the Industrial and Garment printing segments, and the smallest interest is in Packaging's Corrugated printing.

38% OF PRINTERS Anticipate Merger and/or Acquisition Activity (M&A) Within the Next Five Years

As printers respond to the evolution that is occurring within their industries, expansion by investing in new equipment and personnel skill sets is one method of growing, but M&A activity is another way to grow. Service expansion is planned via M&A by 38% of the survey respondents during the next five years. Their plans are evenly split between M&A growth within their primary segment (19%) and M&A expansion into other market segments (19%).

Amongst the segments, Commercial printers plan to grow via M&A activity to the largest extent with 49% planning M&A deals, in comparison to 36% for Graphics and Signage, 22% for Packaging, and 22% for Garment Decorators. In-Plants were not included because their fundamental role is to support their respective organizations.

Merge & Acquire Plans

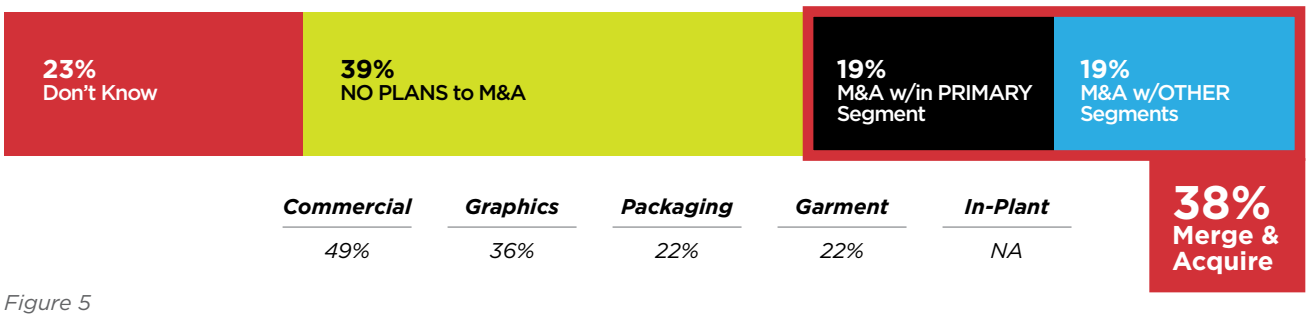

Figure 5
Q: The next five years, what are your merger and acquisition plans, either in merging/acquiring with companies in your primary segment or in other segments? (n=438)

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The similar M&A response to in-segment and out-of-segment growth indicates that printers see a comparable level of opportunity in both areas. Reasons for seeking an M&A transaction primarily center on expansion, specifically including:

- Offerings: Additional products and/or services within a printer's current primary segment or expanding outside their current segment into new market segments.
- Capacity: Additional facilities, equipment and/or skills.
  - Facilities: Floor space for production, warehousing, fulfillment, customer service, etc.
  - Equipment: New technology and/or more equipment to produce similar products or for producing an expanded product portfolio beyond their current offerings.
  - Skill Set: Increasing the number of workers enabling more work to be produced; hiring workers with new and/or enhanced skills to enable new products and/or services to be offered — or offered more effectively and efficiently based on their skills and experience.
- Geography: Expanding printers' geographic coverages, enables them to better serve existing clientele and provide products and services to an expanded customer base.
- Customer Base: M&A transactions completed within a printer's primary segment, reduces its number of competitors and increases the customer base of the resulting organization.

Interviewee Observations:

- I see M&A consolidation becoming fast and furious. (Packaging Segment Printer)
- We are in a mature industry that is consolidating, which creates a number of opportunities. We look at potential acquisitions on an ongoing basis. (Wayne Angstrom, Angstrom Printers)/Commercial Segment

GRAPHICS AND SIGNAGE AND GARMENT DECORATOR SEGMENTS Expressed Mutual Interest in M&A Activity for each Other's Segments

Of the 38% of printers considering Merger and/or Acquisition within the next five years, approximately half, or the strongest interest, was with the Graphics and Signage, Garment Decorators, and Commercial segments. Graphics and Signage and Garment Decorators had M&A interest in each other's segments, and Commercial was most interested in Packaging.

STRONGEST MERGER & ACQUISITION INTEREST		
Garment	→	Graphics
Graphics	→	Garment
Commercial	→	Packaging

Other M&A interest shown by approximately a quarter of segments was with the Graphics and Signage and Commercial segments. Graphics and Signage expressed interest in Commercial and Commercial expressing interest in Garment Decorators and other Commercial printers.

MERGER & ACQUISITION INTEREST		
Graphics	→	Commercial
Commercial	→	Garment
Commercial	→	Commercial

Figure 6
Q: What segment is the company(ies) in you are considering merging/acquiring with? (n=52)

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80% OF RESPONDENTS Believe a Consolidated Printing Industry Event Would Serve the Industry Better than Separate, Segment-Only Events

As the industry continues to evolve and printers consider migration opportunities both within their own segment and within adjacent segments, they want to stay abreast of industry changes, evaluate new technologies and gain insight into their colleagues' strategies via a variety of means including reading articles, doing online research, and peer-to-peer networking.

However, as we saw from previous research on production inkjet adoption (*Production Inkjet Printing: Consideration, Development and End Results*, commissioned by SGIA and conducted by NAPCO Research) no other vehicle proved to be more valuable in enabling evaluation and research of new technologies than industry trade shows where printers could get a hands-on look at new technology, attend educational sessions, talk face to face with vendors and network with their industry peers.

As the industry continues to move toward increased migration across segments, to identify how printers want to see trade shows evolve, respondents were asked if a consolidated industry event that combines individual segments would better serve their needs than individual segment trade show events.

The survey responses demonstrated a strong interest among printers in a consolidated trade show event, with 80% saying it would be Better Overall for the industry in comparison to individual events, including 42% who indicated that it would be Significantly Better for the printing industry.

Across segments, In-Plant printers were most interested in a consolidated event, with 90% describing it as somewhat or significantly better, followed by Commercial printers at 87%, Graphics and Signage printers at 72%, Packaging printers at 66%, and Garment printers at 74%, respectively.

Multi-Segment Event

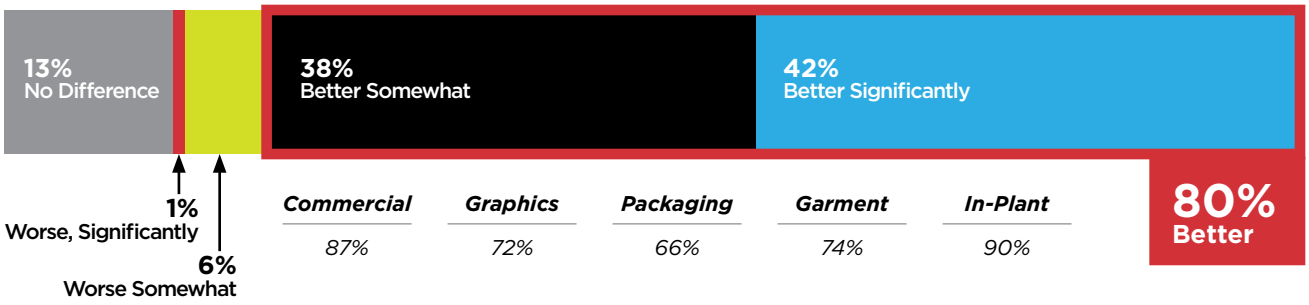

Figure 7
Q: How would a printing industry event/trade exhibition that consolidates individual events serve the industry compared to individual events? (n=470)

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Follow up interviews on the subject pointed to several key reasons for the multi-segment event support:

- The opportunity to see multiple new technology under one roof
- The ability to learn about new opportunities across segments in one place
- Travel savings that are achieved from attending a single trade show event vs. multiple events

Interviewee Observations:

- One big event that has everything represented would be good because I don't have much time. You could walk around and see everything. It would give me a better perspective. (Bahman Taheripour, Calitho)/Commercial Segment
- It would be a big plus because you can go hands-on with all of the technologies, get information, and be able to see everything under one roof. (Arne Larsen, City of Billingham Washington)/Graphics and Signage Segment
- Printers could better justify attending one larger event. It takes time and money to attend trade shows. If they could attend one that covers more bases, it would be easier. (Nathan Thole, Iowa State University)/In-Plant Segment
- Combining additional products into one trade show/conference makes sense from an educational standpoint. There may be something out there that we have no idea even exists. (John Boytz, University of Oregon)/In-Plant Segment

CONCLUSION:
A Call to Arms for Printers — Adapt and Grow in Your Own Industry and Adjacent Industries

Printers, across all segments, see the opportunity to better serve their customers with an expanded set of offerings. An overwhelming 95% see opportunity, are researching it, or have taken steps to expand their offerings. As one printer stated, "those that deliver value are the ones that grow and get the opportunities." Some of the reasons printers see such strong opportunity is because of increasing customer expectations — whether directly within the printing industry or from their perspective as consumers (e.g., Amazon two-day delivery) — which, in turn, raises the bar for all. As another printer stated, "Customers are becoming increasingly impatient … if you don't offer it, others will."

The degree to which printers are expanding is also substantial, with 93% saying they are experiencing some or a significant degree of expansion. One printer noted that it is "amazing how things have transformed in the past three years." In addition to expansion in their own businesses, the perception of widespread expansion occurring within the industry as a whole is significant: 80% of printers see it as accelerating. As one printer put it, "we have to stay up-to-date with technology, stay diverse, and be able to accommodate. If we're able to do more and provide more to customers, we'll thrive — or at least survive."

The areas that printers are most strongly considering and/or researching for expansion, were dependent on the type of printed products they offer today. But, overall the most expansion interest was in the areas of Commercial printing, Graphics and Signage, and several printed product applications within Packaging.

Printers are somewhat more cautious when considering M&A plans, with 38% reporting to have such plans during the next five years. They were equally divided between targeting such M&A plans either within or outside of their primary segment.

When comparing printer interest in entering or researching segments outside their primary segment either organically or through merger and/or acquisition, printers expressed both broad and diverse interest in migrating to other segments. Amongst this interest, there were some that were particularly notable. Strong interest was expressed by both Graphics and Garment printers in each other's segments, and other notable interest was with Commercial's interest in Packaging and Graphics interest in Commercial.

With the opportunities printers have to better serve their existing and new customers through an expanded set of product and service offerings, there is a strong need for them to have a cost-effective, less time-consuming ways to become familiar with new and different technologies, equipment and software offerings, and other business requirements needed to expand their market offerings. When asked if a multi-segment event and/or trade exhibition would be helpful to achieve that, 80% of the survey respondents indicated that it would be.

Some of the reasons given for this strong response included "I don't have much time," I could "see everything and gain a better perspective," I could "go hands-on with all the technologies, get information, and be able to see everything under one roof."

The next few years for the printing industry are likely to be just as challenging as the recent past, with the changes in technology, customer needs, and the seemingly ever-shrinking amount of time to get an ever-increasing amount of work done. However, it also promises to hold substantial opportunity for those printers savvy enough to stay connected to the opportunities within their own market and to explore opportunities that exist within adjacent markets.

APPENDIX

A. Segment Descriptions

Descriptions outline sample applications for each print segment.

- Commercial: Commercial Printers/Publication
  - Book
  - Publication: Periodical, Catalog, Directory/Database, Annual Report, Greeting Card
  - Advertising: Marketing Collateral, Advertising Inserts & Specialty, Direct Mail, Production length runs of pre-printed corrugated liner board
  - Financial: Transaction/Transpromo, Business Form, Pre-Printed Insert, Envelope
- Graphics and Sign: Graphics & Sign Producers
  - Interior: Point-of-Purchase/Point-of-Sale Signage, In-Store Displays, Event Signage/ Tradeshow Graphics & Sign, Museum Graphics & Sign/Displays, Stage/Theatrical Graphics & Sign, Interior Wall Graphics & Sign, Floor Graphics & Sign, Banners, Posters
  - Exterior: Vehicle/Fleet Graphics & Sign, Bus Shelters/Street Furniture, Building Wraps, Exterior Wall Graphics & Sign, ADA Signage, Billboards, Yard Signage, Wayfinding Signage, Environmental Signage
  - Electric: Digital Billboards, Electric Signs, Digital Signage, LED Signs, Neon Signs, Backlit Displays
  - Technical: Blueprints/Technical Documents, Packaging Prototypes
  - Specialty: Sports Board Appliques (Surf Boards, Skis, Snowboards), Fabric Graphics & Sign, Fine Art, Window Graphics & Sign, Decals, Braille
  - Other: Concrete Signs, Wood Signs, Channel Letters
- Packaging: Packagers/Converters
  - Label
  - Folding Carton
  - Flexible
  - Corrugated
- In-Plant: Printing Facility in support of their organization
  - Book
  - Publication: Periodical, Catalog, Directory/Database, Annual Report, Greeting Card
  - Advertising: Marketing Collateral, Advertising Inserts & Specialty, Direct Mail
  - Financial: Transaction/Transpromo, Business Form, Pre-Printed Insert, Envelope
- Garment: Garment Decorators
  - Screen Printing of all garment decorating applications
- Industrial: Industrial Printers (including Printed Electronics) - Additive printing to the manufacturing process
  - Interior Décor: Carpet, Upholstery, Home Goods, Ceramic Tile, Wood, Glass
  - Other: Apparel, Soft Signage, Wallpaper

B. Printer Profile

TOTAL EMPLOYMENT

Of all printers surveyed, 57% had 20 to 499 employees. The percent of printers with this number of employees by segments included: Commercial at 67%, Graphics & Sign at 46%, Packaging at 83%, Garment at 30%, and In-Plant at 52%.

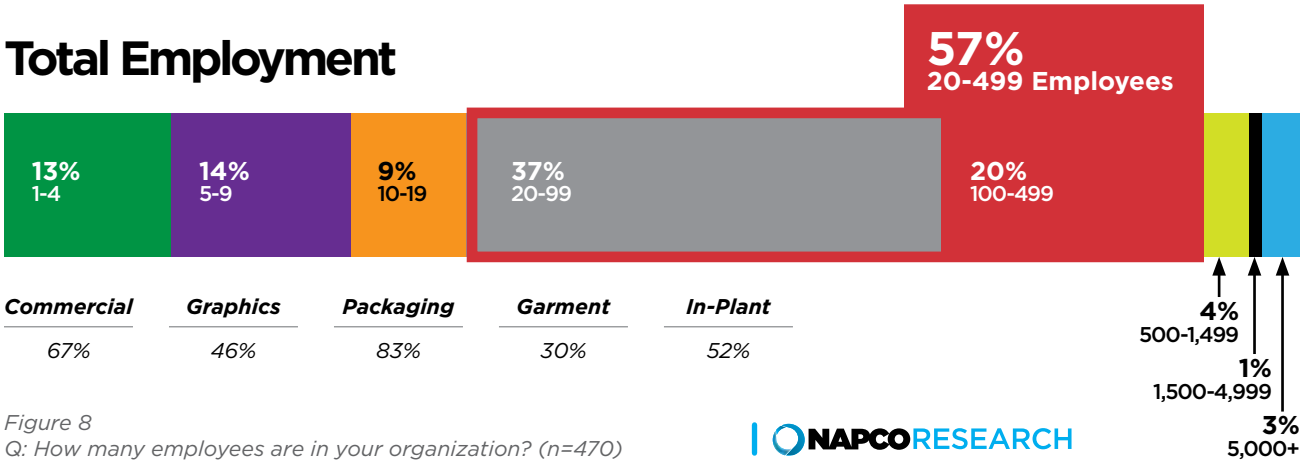

Figure 8
Q: How many employees are in your organization? (n=470)

ANNUAL REVENUE

Similar to employment, the majority of printers (57%) across all segments had between $1.5 million to $49.9 million in annual revenue. The percent of printers with revenue in this range varied across segments with Garment having the fewest at 33% and Commercial having the most at 73%.

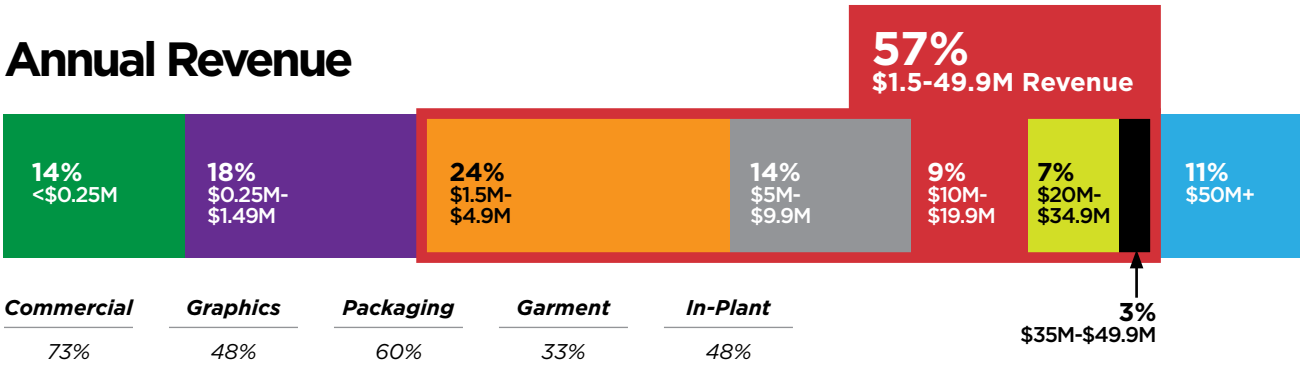

Figure 9
Q: What is your company's total annual sales revenue? (n=470)

WHO WE ARE

PRINTING United, a new event and joint venture co-owned by SGIA and NAPCO Media, will launch in Dallas, Texas, October 23–25, 2019. Focusing on the opportunities presented by the convergence of printing technologies and markets, PRINTING United will cover print and finishing technologies in industry segments from garment to graphic, packaging to commercial, and industrial. Its objective is to convey all components of integrated solutions to satisfy virtually any client need.

WHO WE ARE

NAPCO RESEARCH

Led by a former Forrester Research analyst, the NAPCO Research team 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 for a research consultation.

WHO WE ARE

SGIA — Supporting the Leaders of the Digital & Screen Printing Community

Specialty Graphic Imaging Association (SGIA) is the trade association of choice for professionals in the industrial, graphic, garment, textile, electronics, packaging and commercial printing communities looking to grow their business into new market segments through the incorporation of the latest printing technologies. SGIA membership comprises these diverse segments, all of which are moving rapidly towards digital adoption. As long-time champions of digital technologies and techniques, SGIA is the community of peers you are looking for to help navigate the challenges of this process. Additionally, the SGIA Expo is the largest trade show for print technology in North America. "Whatever the medium, whatever the message, print is indispensable. Join the community — SGIA."

For more information on SGIA, visit SGIA.org