KEYPOINT INTELLIGENCE

SERVICE AREA:

Business Development Strategies

ANALYSIS

PRINTING IN THE UNITED STATES

ESTABLISHMENT TRENDS AND DIRECTIONS

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contents

Table of Contents

Tables and Figures

Introduction

Market figures show that the United States' printing industry is shrinking. This news is unsurprising and is confirmed by recently published government figures. At the same time, however, the dynamics behind these numbers are a bit more interesting. Data from the U.S. Census Bureau's County Business Patterns research provides an inside look at the categories in which the print-for-pay industry is shrinking, but it also shows some growth in terms of number of establishments in certain areas. Published numbers on the in-plant (i.e., print-for-cost) market are also showing decreases.

As the number of overall establishments in the printing industry continues to decline, there are some immediate impacts related to applications and competition that print service providers (PSPs) must address. This document summarizes the establishment numbers from multiple sources to provide an overall view of the U.S. printing market, including both print-for-pay and print-for-cost sites. It also explores the steps that PSPs should consider taking to adapt to these changes.

Print-for-Pay versus Print-for-Cost

Printing businesses can be divided into two basic categories: print-for-pay and print-for-cost. You might prefer to use the terms commercial and in-plant, but this may cause some confusion because of the way print-for-pay markets are categorized by the government. For the purposes of this report, print-for-pay sites include commercial printers, book printers, screen printers, and pre- & post-press sites. The print-for-cost category includes graphic arts in-plants and transactional in-plants.

We will start with a look at government numbers for the print-for-pay portion of the industry using the U.S. Census Bureau's County Business Patterns data. Later, we will compare analyst estimates of the print-for-cost market. Because they are not separate entities, there are no government figures for in-plants—they operate within the confines of a corporation, educational institution, or government office.

What Is a Printing Industry Establishment?

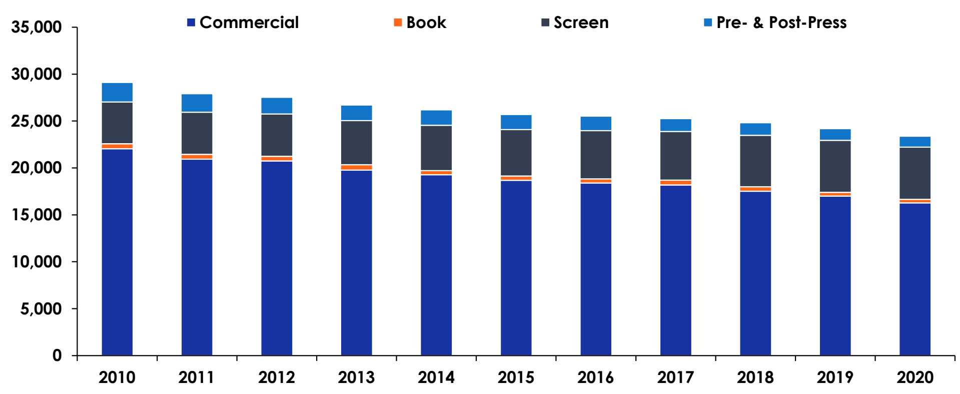
In the print-for-pay market, you can think of a printing industry establishment as a work site. The U.S. Census Bureau describes it as the number of locations with paid employees at any time during the year. This means that if a given establishment existed in January 2020 but was out of business by the end of the year due to the pandemic or other reasons, it would still count as an establishment for 2020. This is important to keep in mind when considering the numbers because any businesses that closed during the early stages of the pandemic would still be counted in the 2020 numbers.

Another point to consider is how businesses are classified in the government's categories. As the printing industry has contracted, the Census Bureau has adjusted its categories over time. Typesetters and color separators operated as separate categories decades ago, but technology shifted those roles elsewhere. Today, the categories related to printing are focused on four areas in the North American Industry Classification System (NAICS). The top category, Printing and Related Support Activities, goes by the three-digit NAICS code 323. Beneath category 323 are Printing (32311) and Support Activities for Printing (32312). The NAICS printing category breaks out into Commercial Printing (323111), Screen Printing (323113), and Book Printing (323117). Keep in mind also that these categories are self-selecting and there may be overlap or misclassification. For example, a prepress house that moved into digital printing might continue to identify itself by its legacy category (prepress) when it might better be described as a commercial printer. In addition, a commercial printer that also does a large amount of book work will likely identify itself as a commercial printer. Print technology categories like digital, flexographic, and gravure printing are all now considered under the NAICS Commercial Printing category (323111).

U.S. Print-for-Pay Industry Size

The latest data from the U.S. Census Bureau's County Business Patterns shows a steep decline in establishments in the U.S. print-for-pay market between 2010 and 2020.

Figure 1: The U.S. Print-for-Pay Industry (Number of Establishments)



Source: *County Business Patterns; U.S. Census Bureau*
Chart recreated by Keypoint Intelligence

The raw numbers are startling, though not particularly surprising. There were a total of 29,118 establishments in the U.S. Printing Industry in 2010, but that number had dropped to 23,393 by 2020. This represents a loss of 5,725, or nearly 20% of the figure for 2010. There were certainly new establishments also entering the market during that time, so the total loss of existing establishments was even higher than that.

A breakdown of these numbers tells a different story by segment:

- **Commercial Printers:** The number of U.S. Commercial Printing establishments declined from 22,048 to 16,283, a percentage drop of 26%. This is the largest of the four segments and had the biggest loss in establishments at 5,765.

- **Book Printers:** The number of U.S. Book Printing establishments went from 536 to 379. Close to 30% of these establishments disappeared between 2010 and 2020.

- **Screen Printers:** The number of U.S. Screen Printing establishments actually increased by close to 25%, from 4,454 to 5,563. This unusual development does not point to a tremendous rebirth in screen printing; it speaks to the digital print technologies that screen printers applied to their application set (e.g., wide format graphics, promotional items, printing on non-paper substrates). This level of growth is remarkable since screen printers faced many of the same type of competitive threats from electronic distribution as did commercial printers.

- **Support Activities (Pre- & Post-Press):** The number of U.S. pre- and post-press establishments, already a fairly small category, dropped by nearly 44% from 2,080 in 2010 to 1,168 in 2020.

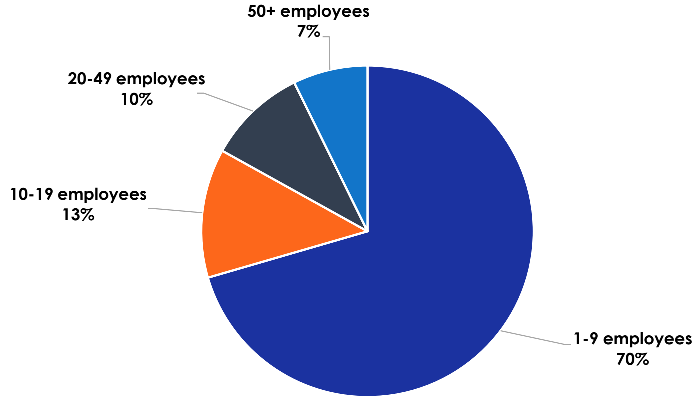
Table 1: The U.S. Print-for-Pay Industry

	Establishments (2010)	Establishments (2020)	Change in Number	Rate of Change
Commercial	22,048	16,283	-5,765	-26.1%
Book	536	379	-157	-29.3%
Screen	4,454	5,563	1,109	24.9%
Pre- & Post-Press	2,080	1,168	-912	-43.8%
TOTAL	29,118	23,393	-5,725	-19.7%
Source: *County & Business Patterns; U.S. Census Bureau*				

Number of Print-for-Pay Employees

One striking aspect of the County Business Patterns data is in how the print-for-pay establishments in the U.S. are broken out by employee size. Overall, establishments with less than 10 employees dominate the numbers, accounting for 70% of the total. This number varies somewhat by category—book printers have the fewest smaller establishments (58%) while commercial printers have the most (75%). Smaller establishments can be the most heavily impacted by ups and downs in the economy, and therefore have a big impact on top-level numbers. Even so, the ratio of small to large printing establishments has stayed fairly consistent over the years.

Figure 2: U.S. Print-for-Pay Establishments by Number of Employees (2020)



Source: *County Business Patterns; U.S. Census Bureau*
Chart recreated by Keypoint Intelligence

The number of establishments is only one measure the size of any industry. Revenue is another key one. You can find that and other data points at the U.S. Census Bureau's County Business Patterns website.

Establishments in Print-for-Cost Environments

As noted earlier, the U.S. Census Bureau's County Business Patterns data does not include in-plants. Fortunately, there have been other efforts to size that market. For many years, Keypoint Intelligence estimated the number of in-plants in its *U.S. Printing, Publishing, and Packaging Market Size and Outlook* report. The most recent report, published in 2019, broke the U.S. in-plant market into three categories:

- About 8,800 in-plant print shops
- About 3,600 in-plant data centers (i.e., transactional)
- About 35,000 small in-plant copy print centers (these are defined as "staffed copy/print facilities that exist to support workgroups in a generally distributed manner")

The Keypoint Intelligence report saw only a slight decline in the number of establishments between 2015 and 2017.

A 2016 PRIMIR study entitled *Digital Printing Technology's Influence on the U.S. In-Plant Printing Market* reported somewhat higher numbers for graphic arts and transactional in-plants but did not include any figures comparable to Keypoint Intelligence's "small in-plant copy print center" category. It defined an in-plant establishment as "a centralized, staffed printing department within an organization, whose primary business is not related to printing and/or publishing." The PRIMIR study noted that there were about 19,000 in-plants in 2016, and that those were split at a ratio of 75% graphic arts and 25% transactional in-plants. This breaks down as follows:

- About 14,250 graphic arts in-plants
- About 4,750 transactional in-plants

The PRIMIR study put the annual decline in the number of in-plant establishments in the low single digits and forecasted that the total number of in-plants would be under 18,000 by 2020.

Comparing the Keypoint Intelligence and PRIMIR figures is difficult because of Keypoint Intelligence's small in-plant copy print center category, which accounts for so many sites. That category was created to account for extremely small in-plant sites with no more than an employee or two operating lighter volume digital copier/printers. Some of these locations might not even consider themselves to be printers. With this in mind, it is best to focus on those sites defined as true graphic arts or transactional in-plants. PRIMIR puts the 2016 total at about 19,000 while the Keypoint Intelligence figure is approximately 12,400. Perhaps the difference here is that PRIMIR included some very small in-plants in its calculations.

Of course, market trends indicate that the number of in-plants has declined since these reports were published. We can only guess at the true number, but today there are certainly no more than 17,000 in-plants and the actual number may be quite a bit less.

Membership in in-plant printing associations could shed some additional light on the state of the in-plant market, but those associations that we reached out to did not share specifics about their membership numbers. Another possible source of information is readership of in-plant oriented media. In its media kit, *In-Plant* Impressions magazine reports that it has a "total audience" of more than 46,000. There are about 12,000 subscribers to its print edition, its electronic news goes to more than 9,000 e-mail addresses. Keep in mind that these subscriptions go to individuals and not establishments, and some of them may not represent in-plants. For example, vendors of equipment and consumables will have good reason to closely follow the trends of this market.

Application Expansion and Diversification

What are we to make of this data? One takeaway is that categories of printers are condensing and combining. This is why many of today's printers are so tightly focused on strategies that involve adding new services. This type of expansion and diversification is important for survival, but it also explains why competition is coming from unexpected places and new market participants.

There is also increasing competition between print-for-pay and print-for-cost sites. This stands to reason—why wouldn't the print-for-pay sites (with an estimated 24,000 establishments in 2020) see competition from the many print-for-cost sites (about 18,000 in 2020 based on PRIMIR's forecast) that are striving to prove their value to their institutions?

Competition from non-printing sites like marketing and design firms is also a factor. These firms have added some printing equipment, particularly digital print equipment. Even though they are unlikely to define themselves as printers, they are still competitors.

The numbers also support the trend toward adopting a broader application set. The growth in the number of companies identifying themselves in the NAICS Screen Printing category (323113) is one indication of this. While these companies may be doing some additional screen printing, the growth in this category is more likely due to improvements in wide-format digital printing technology over the past two decades. Clearly, one of the most common areas of application expansion for print-for-pay and print-for-cost sites has been to add wide-format services to produce posters and banners.

These establishment numbers provide a strong case for any PSP to work on expanding their application portfolio and to consider how to fight off new competitors.

Opinion

Market data from the U.S. Census Bureau and other sources can be dry and depressing for today's printers, but a closer look at the numbers may identify trends that can help PSPs succeed. This data also enables a broader understanding of larger industry trends that impact day-to-day business. Despite declines in the number of overall establishments, the U.S. printing industry still generates billions of dollars in revenue that print-for-pay and print-for-cost establishments aggressively compete for.

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Comments or Questions?