Experience, Relationships and Inkjet in the Commercial Printing Marketplace

KOMORI

Introduction

When making the decision to evaluate a digital press, many printing companies turn to their existing OEM for support. This may be because their OEM will provide some level of analysis and advice for free, or at a lower cost than an expert consulting firm would charge. More often, it is because the company has a level of comfort and trust with their OEM. They look to them as a partner in helping to grow the business. Many commercial printers have less access to this type of partnership when evaluating inkjet because few of the conventional printing OEMs, with whom they have decades long relationships, play in the digital printing marketplace. Even fewer have embraced inkjet.

Table 1 below shows the leading manufacturers of offset press equipment and their level of focus and investment in production inkjet. While some offset press manufacturers have been slow to enter the inkjet market, inkjet OEMs have been slow to pursue the commercial space with their inkjet offerings. There are three contributing factors that have proven frustrating to commercial printers interested in faster, inkjet-enabled digital solutions from inkjet OEMs:

- Until recently, most inkjet devices (except for UV-based presses) could not reliably deliver high-quality results on offset coated stocks. There are still only a handful of aqueous inkjet devices that support offset coated and most require additional fluids to drive compatibility.
- Digital OEMs such as Canon, HP, Ricoh and Xerox have full color toner devices that currently produce the majority of digital pages in the commercial print market. As quality parity is reached by inkjet offerings, the inkjet devices compete with highly profitable toner installations from the same companies. Some OEMs are addressing this installation cannibalization challenge more effectively than others who continue to protect their toner base.
- Commercial printing workflows and requirements are different from the transaction printing, direct mail and book markets that have been the major focus for inkjet OEMs. Commercial print companies want to work with partners who know their business.

Table 1. Inkjet Portfolios of Largest Worldwide Offset Lithographic Press OEMs			
Company	Inkjet Offering	Format	Market Segments
Heidelberg Druckmaschinen	PrimeFire 106	B1 sheet (simplex)	Industrial, Packaging
Koenig & Bauer	RotaJet	Web	Commercial Print, Décor, Packaging,
Komori	Impremia IS29	B2 Sheet	Books, Commercial Print, Direct Mail, Point of Purchase, Signage
	TruePress Jet520HD (partnership with Screen)	Web	Commercial Print, Direct Mail
	Impremia NS40 Partnership with Landa (launching in 2020)	B1 Sheet	Commercial Print, Packaging, Point-of-Purchase
Manroland Goss	None		
Ryobi MHI Graphic Technology	None		

Commercial Printing is Different

Commercial Print is a blanket term covering many aspects of the print market. General commercial print organizations may be large or small, use web or sheet-fed equipment and may support a wide array of applications, or only focus on a few. Applications in this segment-of-segments include business identity (stationery, business cards), marketing collateral (brochures, catalogs, calendars) and direct marketing (postcards, direct mail, coupons) as well as financial and legal printing and even photobooks, yearbooks, and gift wrap.

What these wide-ranging applications have in common is that they have traditionally been composed of long-run, high volume static work and that the average volume for the work is changing.

As run-lengths and work-mix have evolved, commercial printers have adapted by taking on more types of work. These companies often need to be able to compete in more than one segment to maintain profitable volume and revenue. Efficiency driven web operations also need to be able to gang together work that runs on the same substrate and drive efficiency throughout the setup and production process. Value driven printers must provide customers with concept through delivery services including special effects and innovative techniques.

Offset OEMs have invested in efficiency and flexibility improvements, to support their customers' changing needs and run lengths. While the ability to combine work into a single job to run on the same line can reduce the overall number of setups and plates needed and lower the profitable volume threshold for jobs, these updates can't match the efficiency of digital for low and mid-volume work. Likewise, even higher margin, value driven programs in the offset world are not economically feasible for low volume work. Inkjet bridges the gap between efficiency driven and value driven print environments while providing new opportunities through personalization and versioning.

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Commercial Print Volumes Slowly Shifting

More than 74 percent of worldwide commercial print volume was produced on web or sheet-fed offset equipment in 2017 with less than 5 percent produced digitally[i]. Crossing over to the advertising printing and direct mail space where commercial printers also operate, 78 percent of global page volume was produced on offset but over 12 percent of volume is now produced digitally[ii]. Several factors contribute to the relative speed of transition from offset to digital:

- Offset presses have a very long useful life when well maintained and, for many companies, their press investment is a "sunk cost."
- While average run lengths are declining, commercial printing work continues to come in a range of sizes from millions of impressions to a few hundred static impressions. Offset is still the most cost-effective platform for long-run work.
- Personalized or versioned commercial work is on the rise, but much of this work continues to be delivered with personalization overprinted on offset produced shells. This segment is particularly ripe for transition to inkjet for cost efficiency and speed to market and this has driven advertising mail to transition and grow new digital pages more quickly than other segments.

With a wide range of work and diversity of run lengths, commercial print organizations often need a mix of production technologies to meet customer needs and stay competitive. This means that commercial printers are more often adding digital equipment to the mix, not making a wholesale change of technology. In the past, first time digital acquisitions were toner-based due to the need to print high-coverage work on offset stocks. Inkjet devices can now meet these requirements at lower cost and higher speed than toner devices and commercial printers often need support in determining the best fit for meeting their coverage, substrate, work mix and volume needs. In 2017, global advertising printing page volume produced on inkjet surpassed toner.[iii]

Table 2. Page Volume by Production Process in Overall Commercial versus Advertising Sub-market 2017
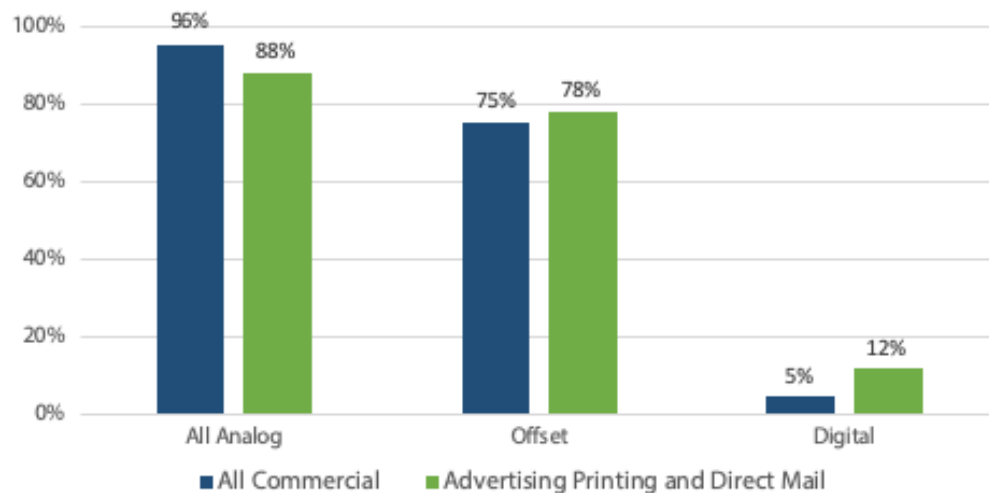
Source: Smithers Pira

Inkjet in an Offset Environment

Commercial printers using inkjet often find that they have some work that is directed only to inkjet and other work that uses a combination of inkjet and offset presses. In the latter case, it is important to be able to use the same stock for the work printed using each method. Production inkjet OEMs have achieved major breakthroughs in printing on offset stocks through several approaches:

- Hybrid aqueous inks that enable printing on uncoated and gloss coated offset stocks without primers or pre-coatings. Avoiding additional fluids reduces costs and enables higher ink volume to be used while preserving the surface feel of the offset media.
- Indirect transfer of ink to the substrate using a blanket. With this method, ink is jetted onto an ultra-smooth blanket surface and released onto the paper after liquid has been evacuated.
- UV curable inks enable high coverage printing on offset uncoated and coated stocks as well as a range of other media including embossed papers, canvas and plastics. It also allows single-pass duplex printing and immediate finishing due to the immediate curing of the ink.

These approaches allow inkjet devices to print on less expensive offset paper instead of inkjet formulated paper, which provides a common, efficient supply chain and consistency with mixed process jobs. Another factor in maintaining compatibility is the paper format, web versus sheet and the size of the sheet.

In 2017 over 38 percent of global commercial print volume was produced on sheet-fed offset presses[iv]. The press format in commercial printing is largely based on volume and flexibility requirements with B2 sheet being the most common press size. Commercial printers currently using a half-sized press will find consistency with B2 inkjet in paper handling and finishing compatibility. Commercial printers who produce significant volumes of direct mail may find that a continuous or roll-to-sheet inkjet device can meet their needs. There are a wide array of inkjet options and finding the right fit requires a deep understanding of the market in general, available technology and your specific volumes and workflow.

Experience and Relationships Matter

Komori is a leading provider of web and sheet-fed offset equipment and the only offset OEM with multiple inkjet offerings delivering commercial quality output. Globally, Komori holds a leadership position in offset press technology in the commercial space. With decades of experience supporting commercial printers and optimizing their production environments, Komori offers hardware, software and support tailored to the most quality-intensive segment of the print industry.

Komori is uniquely positioned to help commercial printers grow their business with inkjet by recommending the right press for the right application at the right time. This may mean replacing Komori's own offset presses with inkjet - or adding inkjet capabilities to the customer's offset or toner portfolio. Komori offers an array of inkjet solutions, all of which deliver exceptional print quality on offset stocks, including gloss coated papers. Customers have the flexibility to choose from continuous web, B2 sheet-fed or the recently announced B1 sheet-fed solution, based strictly on run length and application mix, knowing they will have the ability to print on the same substrates with the same quality on their inkjet press as they can on their offset press. In fact, customers may have even more substrate options to choose from. Many commercial printers with a mixed portfolio of Komori inkjet and offset devices say that their customers don't know or care where the job was printed. They only care that it was printed on the paper they want and that it looks great.

Komori understands that raising efficiency and profits by taking advantage of both offset and digital printing technologies is the key to success for most printing companies. Success requires the reliability and speed of offset presses combined with the personalization capabilities and short run efficiency of inkjet printing systems – with each delivering the print quality that customers demand.

To learn more about Komori's inkjet solutions, visit
https://www.komori-america.us/inkjet-solutions/category/inkjet

> ## Komori is uniquely positioned to help commercial printers grow their business by recommending the **right press for the right application at the right time.**

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End Notes

[i] Extrapolated from data provided in Smithers Pira "The Future of Global Printing to 2022" Table 3.23 Print processes used in global commercial printing market 2012 - 2022

[ii] Extrapolated from data provided in Smithers Pira "The Future of Global Printing to 2022" Table 3.20 Print processes used in global advertising printing market 2012 - 2022

[iii] IBID

[iv] IBID

About Inkjet Insight

Inkjet Insight LLC is the most complete, unbiased and valuable source of information for companies evaluating and using production inkjet.

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