

Considerations In Purchasing Digital Printing

This presentation is based on an article written by a Xerox Corporation Workflow Solutions Specialist for the purpose of advising print buyers on the important factors to consider in selecting a digital print services provider. The latest digital print technology requires a different evaluation process compared to the process involved in selecting a traditional printer. The original article questions are printed in red, the answers are printed in black and each section is followed by a discussion in blue detailing MegaSolutions's business operations and how they are designed to optimize the digital print production process to insure the highest quality and on-time delivery.

10 Considerations when working with your digital color print provider

Print buyers generally work with digital print providers for services that traditional printing technologies alone can't deliver. So it makes sense that buyers use different criteria in selecting a digital print provider than they use for a traditional printer. We've consulted some of the nation's leading digital print buyers and providers to assemble the following 10 considerations to maximize ROI when working with a digital color print provider.

1. What experience do they have in digital color printing?

Most print providers will tell you how long they've offered digital color printing, who their customers are, and what types of applications they run. Ask to see work samples produced with processes similar to yours and for relevant customer references. Take the plant tour. Investigate their other capabilities. For example, expertise in information technology can also contribute to the digital color printing skill set.

MegaSolutions has been on the forefront of digital printing technology since its inception. We had one of the first high speed digital copiers in the Silicon Valley in 1992 and installed Xerox DocuTech high speed laser printing systems shortly thereafter. At the present time we have 3 Xerox DocuTech 6135 laser printers (135 copies/minute, 600 dpi) driven by the Xerox DigiPath document management system as well as a Heidelberg 9110 laser printer (110 copies/minute, enhanced 600 dpi). We had one of the first color copiers ever produced and have continued to acquire the latest color copier/printer technology as it has developed. We presently have a Canon 3220 color copier/printer (32 copies/minute, 600 dpi) and the Canon 3200 color copier/printer (32 copies/minute, 600 dpi). The flagship equipment of our operation is our three HP Indigo digital color presses: the HP Indigo 5000 5-color press, the HP Indigo 3060 6-color press and the HP Indigo 3050 4-color press. All our employees have 5 or more years experience on this equipment. Our loyal base of printing trade customers as well as several large corporate customers generally recognizes us as one of the premier HP Indigo operations in the San Francisco Bay Area. We have the experience and equipment to meet the needs of the most demanding digital print-buying customers.

2. What digital color printing equipment do they use?

Production-level digital color printing comes in two basic types: production devices that use digital imaging techniques, such as toner-based xerographic laser printing, and direct imaging digital offset presses, which use true offset technology for offset image quality. Both print directly from electronic files, cutting down on makeready to improve turnaround. Toner-based system image quality and processing power has been improving since the mid-1990s. Contributors include improvements in printer engines, the RIPs, and in papers and substrates. Be sure you understand the range of papers and substrates the equipment can handle, including size, weight, and maximum printable area.

Our equipment list was set forth in response to point #1 above. The Xerox DocuTech and Heidelberg laser printers are very similar to the desktop laser printers in your office or home except that they print at very high speeds utilizing a laser-imaging device for enhanced print quality. The color copiers utilize toner when they print. One limitation of toner-based printing is that when you fold across printed areas toner can crack and flake off. We have a scoring machine designed to minimize this problem by using a letterpress score as opposed to a wheel score to allow for clean folding without damaging the print. This problem does not exist for the HP Indigo digital presses because they use an ink-based system. This machine is the close as you can get to offset printing. The color vibrancy actually exceeds that available on many offset presses.

The Heidelberg 9110 printer can print on coated papers, a feature that cannot be reliably achieved on the Xerox DocuTech printers. This feature allows customers to economically run short-run black printing jobs on the printer that formerly could only be done on a small one-color offset press. The HP Indigo digital color presses originally had limited paper stocks that they could use. This limitation is rapidly disappearing as many new stocks are being developed and made available each month resulting in more work moving from offset presses to digital color presses such as our HP Indigos.

3. What services do they offer?

Most digital color printing firms do much more than produce color output. Additional capabilities can include prepress services, information technology expertise, distribution and fulfillment services, telemarketing, communications program consulting, and more traditional services, such as offset printing. Ask how these services can benefit you. Do they have experience with the types of files you will submit? For print on demand, you'll need to understand their electronic storage capabilities, who will "own" the files, and how easily you can share them. If you are investigating personalized variable information printing and "cross-media communications" efforts integrated with the Web, then database and programming considerations come into play. Database issues include security and the firm's capabilities for "cleansing" the database — eliminating duplicate entries and verifying accuracy, which may require proactive research and telemarketing at least once every six months. You may wish to speak directly to the programmers the firm uses to understand how their experience relates to your projects.

In addition to our wide array of digital printing services, MegaSolutions has an experienced prepress department available to process customer files for printing. We support both Macintosh and PC platforms in a variety of layout and graphics programs. The prepress department is experienced in managing and processing databases that are used in conjunction with personalized variable data print projects as well as mailing regulations and database manipulation to minimize postage expense (ZIP+4, barcodes and CASS certification).

Our Xerox DocuTech DigiPath archiving system archives manuals, training and other types of documentation for print-on-demand runs. Document archiving allows a complete system of documentation management.

Our most exciting service is our online print and documentation management system. This system allows customers to log in online and re-order documents from archive, order templated documents such as business stationery (business cards, letterhead and envelopes), datasheets, postcards, etc., as well as merging variable data personalized pieces on line with templated or supplied files. This system produces PDF proofs for online viewing and approval and automatically pushes jobs into our production pipeline and notifies the customer of pricing and shipment.

4. Who are their partners and how do they work together?

Digital color print providers sometimes round out their offerings with partner-provided services. This helps them scale up a business without committing to expensive capital equipment, and it gives you access to a more complete offering.

MegaSolutions maintains its own mailing permit for smaller mailing projects and partners with a near-by mailing house for larger mailing projects. We work closely with our customers and several partner organizations to produce personalized mailing programs including concept development, document design and layout, print, mailing and integrated web tracking of responses. This is the future of mail marketing and we consider ourselves at the forefront of its development and integration into a complete program of customer communications and marketing.

MegaSolutions produces short-run CD and DVD duplication in-house and works with several large duplication companies to insure the most cost-effective duplication solution for our customers.

Our salesmen have over 25 years experience in the printing industry including project management for just about every conceivable print project you can imagine from custom labels to computer forms to packaging and boxes.

Should longer run traditional offset printing be required, we partner with one of the largest and most well respected trade printing companies in the San Francisco Bay Area. They are located several doors away from our shop.

5. What is their relationship with customers?

You need to have a high degree of comfort with your digital printing service, especially as many require you to share some of your company's — or your client's company's — most sensitive data. The best digital print providers take an active interest in your business and play a consultant-like role to help you get the most out of their services, and to help you stay on top of trends that can influence your future directions.

Business has changed over the years and MegaSolutions has evolved to meet the needs of our customers. We no longer consider ourselves as a printing organization although digital printing

is our most important end product. We work with our customers to examine their specific needs and requirements relating to all forms of communications with their customers and prospective customers. MegaSolutions has developed expertise to enable our customers to maximize the return on their dollar for their marketing and documentation purchases. We encourage our customers to produce short-run customized versions of their marketing and documentation materials to increase their impact and eliminate obsolescence and storage costs.

6. How do they communicate with you about your job?

Start with job delivery — is their network powerful enough for effective job transfer and timesaving Web-based interactions? How do they keep you in the loop as the job progresses? How are proofs and sign-offs handled? Often, a range of options is available — from PDFs shared over the Internet to more offset-oriented approaches such as Specifications for Web Offset Publications (SWOP) certified digital prints. A benefit of digital printing is that proofs can be produced on the same machine that will run the job.

Communication is our business. We assist our customers in communications with their customers and prospective customers and we work very hard to keep our customers informed of the progress of their projects. Emails and telephone calls are answered promptly. Our web-based production management system allows customers to view real time online proofs and approve them immediately, after which the job is pushed into the production system and pricing and shipping information is immediately transmitted back to the customer. Our FTP Server can receive downloaded documents up to 500mb and we maintain approximately 1.5 terabytes of archives.

Quotes are returned within minutes of submission. Should customers require hard copy proofs, we produce proofs right off the same equipment on which the job will be run so the customer knows exactly what their job will look like. We pride ourselves on being very service-oriented and our philosophy shows in the results enjoyed by our satisfied customers.

7. How quickly can you expect jobs to be turned around?

Because digital printing cuts out many traditional steps in job setup, same-day turnarounds are not only physically possible, but often practical. However, you may pay a premium for the fastest turnaround. In contrast, variable information printing can require substantial advanced planning and programming, which can take days or even weeks. And even when the program is running smoothly, the database should be updated about every six months.

This is where MegaSolutions really shines. Most jobs are shipped within 24 hours of approval of the proof and many jobs are shipped the day of receipt. Second shifts are run when necessary. Our fleet of Xerox DocuTech printers can produce 500,000 impressions within a 24-hour period. Our business model is predicated on quick turnaround and we have the equipment and personnel to accomplish tight deadlines.

8. What image quality can you expect from digital technologies?

Most print buyers today find that digital color print image quality is suitable for most of their applications. Today's newest digital color production presses, RIPs, and digitally optimized substrates permit color experts to make professional-level quality adjustments to produce output that is often characterized as "nearly indistinguishable from offset." Perhaps the best proof of color image quality can be provided by having the print provider provide you with prints produced on your target stocks from files you submit.

All of our equipment is state-of-the-art. The Xerox DocuTech printers print at an enhanced 600 dpi. Prints from the DocuTechs will look somewhat lighter than those coming off your desktop laser printer because they have an enhanced toner technology to produce finer screens. The color copiers are 600 dpi which is best available production color printers available. The flagship digital presses of MegaSolutions's operation are the three HP Indigo color digital presses. Their output rivals and often exceeds large press output. The colors on the HP Indigo press are more vibrant. This technology allows our customers the luxury of viewing a proof off the press insuring that the finished job will match the proof they approve. All of our proofs are printed directly from the equipment that will produce the final job. This is a major advantage of digital printing equipment.

9. Can they assure production integrity and security?

As digital technologies enable ever more complex jobs, the integrity and security of production processes becomes increasingly critical. Do pieces get placed in the right packages? Does the mail go to the right person? Does the personalized greeting identify the recipient's correct gender? Nothing undercuts the benefits of a personalization program more than personalized errors. Many shops have automated systems that provide the assurances you need. Automated bar code and optical mark recognition (OMR) systems ensure packaging integrity. Many variable data printing systems have automated job assurance checks. Staff attitudes also play a role. Generally these are all on display in plant tours.

MegaSolutions has a detailed Quality Control Procedure for every department in the production process as well as a final Quality Control check that is administered to every job prior to shipment. Personalized jobs are proofed prior to production to insure that the personalization is correct. Once proofed, the equipment is controlled by software that insures that the final product will be accurate and correct.

The online print management system contains customer log ins and passwords to protect the security of their projects and materials. Since many of our customers are in the software and hardware business, we are acutely aware of the need for security and confidentiality in the projects we produce for our customers.

10. What do they charge for and how much will it cost?

At lower run lengths — usually less than 2,000 — digital printing on demand is less expensive than offset. The precise breaking point depends upon a number of variables, including the printing equipment, page coverage, and substrates used. Some digital print services carry premium pricing, such as for fast turnarounds and variable information printing. Database setup and management may be charged separately or rolled into an overall program cost.

Pricing decreases as run length increases. Our automated online print management system allows us to create lower customized pricing that reflects the efficiencies of automation. Our large printing trade customer base testifies to the competitiveness of our pricing. The most important element of our pricing structure is that we work with our customers to understand their needs and we construct programs to reduce their costs and increase the efficiency of their customer and prospective customer communications and documentation.