Digital and Dynamic

New technology and a focus on process improvements help short-run book manufacturer King Printing increase efficiency.

By Darin Painter Photos: Brian Wilder

he traditional gift for a 30th anniversary is pearl jewelry. Last year, just before King Printing's 30th year in business, the company rewarded itself with something even more valuable: equipment that further solidified the company's integrated solutions strategy.

For three decades, savvy investment in new technology has enabled the short-run book manufacturer to increase efficiency and win business from domestic and international publishers. That was the firm's goal last year, when it began operating a Kodak Magnus 800 Platesetter.

It was a weighty decision for Lowell, Massachusetts-based King Printing, which has been an industry leader in computer-to-plate technology since installing a platesetter from the former CREO in 1995. The full-service production facility, which also operates web and sheetfed presses, offers digital printing, along with a broad range of finishing options such as case binding, perfect binding, saddle-stitching and spiral binding. (See "Spotlight on King Printing.")

King Printing has achieved what many graphic communications firms aim to accomplish—becoming a value-added services provider. A

Spotlight on King Printing

Name: King Printing Co., Inc. Location: Lowell, Massachusetts, USA Employees: 100-plus

Business in Brief: The printer specializes in short-run printing and binding for self-published authors, individuals, small businesses and book publishers. Its Digital Print Center includes a wide array of monochrome and multicolor digital production presses. The firm, which also operates web and sheet-fed presses and offers assembly services, caters to clients worldwide including Europe, Asia and Africa.



King Printing Co., Inc. is a value-added services provider that operates a KODAK MAGNUS 800 Platesetter and other new technologies that increase efficiency. KODAK Unified Workflow Solutions enable King Printing to operate streamlined digital and traditional print environments.

key component of the company's success is Kodak Unified Workflow Solutions, which enable King Printing to operate streamlined digital and conventional environments.

"Kodak's production systems address the numerous tasks that go into delivering products to our customers," says Adi Chinai, joint managing director of King Printing Co., Inc. Those production tools manage, control and produce everything from proofs to short-run printing with variable data, split jobs and reprints. "A seamless production workflow enables work to route easily between offset and digital," he says. "That's critical to our growth."

Since Chinai's father, Sid, launched the family-run company in 1978, King Printing has consistently added equipment that "could create



"The platesetter immediately gave us the power and flexibility to run any type of job, from our smallest plate size to our largest." —Adi Chinai, joint managing director, King Printing Co., Inc.

better economies of scale for our customers," Adi says, including digital prepress solutions that make production faster.

Platesetter helps King triple production

Once a purely manual operation, the prepress process has become increasingly digitized. "Picking the right technology and staying ahead of the curve is a constant challenge for book printers," says Chinai.

King Printing's team selected the KODAK MAGNUS 800 Platesetter primarily because of the machine's ability to hold different-sized plates in multiple bays, Chinai says. "The device immediately gave us the power and flexibility to run any type of job. From our smallest plate size to our largest, it is now fully automated, thus reducing downtime. Inline registration, punching and automatic slip sheet removal make the device easy to use and efficient."

Kodak's line of MAGNUS Platesetters delivers end-to-end automation and up to 40 plates per hour, helping to make graphic communications service providers more productive and profitable. The platesetter comes with an autoloader with a single-cassette unit that holds up to 100 plates, or a multi-cassette unit that holds five trays and up to 500 plates. (King Printing uses KODAK SWORD EXCEL Thermal Plates.)

In the fully automated system, plates move through the MAGNUS 800 Platesetter auto loading system in parallel, rather than waiting for one plate to complete the cycle before starting the next plate. While one plate is being imaged, the next is already loaded and waiting. Operators working during King Printing's three shifts can select a "Quick Plate Remake" option that enables them to bypass the autoloader and insert a new plate directly into the imaging device. "One of our main goals is to maximize press time," Chinai says. "Thanks to Kodak's platesetter, we've been able to triple production." The company has achieved average annual sales growth of 45% during the past few years.

Integrated workflow fuels growth

Because King Printing produces both offset and digital printing, the company wanted technology that could integrate its print systems into a single, cohesive workflow—one solution that unites various aspects of business, production, color and data.

When graphic communications firms implement new systems or add new service offerings to differentiate themselves, each new system adds a level of complexity to their operations. This often results in a disconnected workflow, as the various systems don't exchange information and aren't centrally located.

KODAK Unified Workflow Solutions provide an open infrastructure so King Printing can manage both traditional and digital print production in a scalable, modular way. The technology extends from the prepress department and pressroom to the Internet, and includes digital asset management products, tools for remote collaboration and approval, and applications that allow customers to create their own variable data campaigns.

The heart of King Printing's workflow is the KODAK PRINERGY Workflow System, a fully integrated solution for organizing page processing, >>

Quantum Leap

For users who demand ultra-precise imaging and registration, the KODAK MAGNUS 800 QUANTUM Platesetter includes KODAK SOUARESPOT Imaging Technology. It delivers automatic compensation for temperature-related plate expansion and contraction for precise, consistent imaging from plate to plate and machine to machine. At drupa 2008, Kodak unveils the fastest, most productive addition to its MAGNUS line: a device that can image up to 60 8-page plates per hour. The KODAK MAGNUS 800Z QUANTUM Platesetter includes an advanced thermal head that generates double the laser power of its predecessors.

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proofing, and computerto-plate and digital printing production. Chinai says it enables

his company to reduce prepress costs and errors, improve turnaround times, and optimize file processing and production management. "Kodak's equipment enables a truly integrated PDF workflow here, which means orders move quickly and correctly from the first stage to the last," he says.

Within PRINERGY 4.0 is the KODAK INSITE Prepress Portal System, an Internet portal that streamlines job submission, job-status tracking, online collaboration, and remote proofing and approval. From any Web-enabled computer in any location and at any time, King Printing's customers, prepress operators and customer service representatives can manage and track job activity, proof print jobs, and collaborate with creative and prepress staff on changes. To ensure rapid delivery to its customers, King Printing relies on the Kodak NexPress 2100 Digital Production Color Press and variable data printing solutions from Kodak.

"We selected the NEXPRESS 2100 Press because the digital color capabilities of the system will take us to a new level and the quality is extremely close to offset," Chinai says. "With solutions from Kodak, there are new applications we can run. You don't have to produce 100,000 copies to be cost-effective. This kind of leading-edge technology adds efficiencies to our operation."

The variable data solution is an integrated client-server package for advanced, high-speed variable data printing. It offers a fast, scalable system that's ideal for demanding high-volume production environments. It integrates into King Printing's workflow, and enables the firm to produce full-color pieces with variable text and images and database-driven charts and tables.

"Innovation from Kodak continues to propel us forward, as does our commitment to customer service," Chinai says. "We consider that combination to be a difference-maker. Technology makes us more efficient, and our dedicated people make sure our customers truly get what they want, when they want it."

A digital leader in a healthy niche

Book production represents a growing opportunity for digital print and on-demand print services. Many publishers have started using on-demand printing processes for first print runs (and in some cases subsequent print runs) on books with uncertain demand.

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business models and workflows are emerging that address distribution channels and warehousing practices in innovative ways."

The traditional short run of 100 to 500 has been reduced to fewer than 20 for many digital book printers. Many firms can now print soft- or hardcover books without creating excess inventory. No longer do publishers need to commit to print runs of 100,000 and absorb the risk of potential waste or product spoilage if books don't sell. In other words, companies can digitally print and bind "just in time," instead of "just in case."

According to the research firm InfoTrends Inc., print runs between 250 and 499 are increasing 40%, while runs of 50,000 or more are decreasing 44%.

Publishing workflows differ from typical commercial print workflow, with the need for more run-length flexibility and different degrees of workflow complexity and options. Solutions from Kodak help publishers develop new market opportunities, while providing a complete, customized solution for most types of publishing print providers.

King Printing Co., Inc., which specializes in servicing trade book and educational publishers, has recently embarked on a new market: selfpublishing. Aspiring authors turn to the company to order as few as 100 books. (A typical run for the printer is about 2,500.)

As the company continues to implement new ways to grow, increase efficiency and deliver powerful marketing and publishing services to clients, "Kodak will be with us every step of the way," Chinai says.

Short-Run Book Market is Thriving

Book printers are increasingly moving to digital printing technology, especially in these instances:

- Low-quantity orders. Many printers specialize in producing single reprints of out-of-stock books. These firms can produce thousands of different titles daily.
- Test runs. Publishers often need a small number of books for market testing or editorial reviews.
- Variable information. To increase impact and customization, printers can change copy or graphics on each completed book or in a set of books.

For more information, visit www.kingprinting.com