Bridging the Digital Divide
Essential Strategies for Printing Success

Introduction
There is no question that we live in times of dramatic change, and the Graphic Arts industry has faced its share of this change. In many ways, our industry has changed forever. For those who understand the implications of these changes and respond proactively, the future is bright.

Underlying success for any graphic arts service provider is the need to work within the context of an efficient, digital workflow, a workflow that must extend from the customer through final product delivery, invoice and payment, and which must span multiple technologies provided by multiple vendors.

This white paper will discuss the trends that are impacting graphic arts businesses and the changing needs of buyers of print and related services. And it will paint a picture of the successful graphic arts service provider, the technologies being deployed, and what these companies are doing to meet today’s challenges while preparing for tomorrow.

An Analog World No More
Much of the market shift the graphic arts industry is experiencing is due to a rapid migration to digital. Conventional analog production processes—from proofing to platemaking, from prepress to finishing—are rapidly being replaced by digital solutions. Film is giving way to computer-to-plate solutions. Offset presses are becoming more automated and in many cases, volumes are migrating from offset presses to digital printing devices.

While these changes have presented challenges, they have also presented significant opportunities. Many savvy graphic arts service providers have been quick to take advantage of these opportunities—and reap the rewards. By incorporating digital workflows and digital equipment into their operations, they have achieved new levels of efficiency and productivity, and they have been able to offer new services—and new levels of service—to their customers.
In the early days of digital printing, service providers who also offered offset printing commonly configured their digital printing operations as separate divisions, or even separate businesses. While service providers achieved varying levels of success with this model, it no longer is as viable in today’s market, where a more appropriate model is a hybrid portfolio that features the integration of digital and offset environments to provide a seamless production environment designed to deploy the most appropriate printing technology for a given job, on the fly, based on run lengths, overall workload and other production criteria. Those who have successfully implemented this new model have also implemented an integrated digital workflow combining such vendor-specific offset workflows as Agfa’s Apogee or Creo’s Brisque or Prinergy, with digital workflow such as that offered by EFI’s Fiery®. Such integration requires strong support of open industry standards and the ability to easily direct work from the primary offset workflow to the digital workflow with a minimum of file manipulation.

EFI Fiery has been the standard for color servers driving xerographic digital devices for more than a decade and leads the industry with tools and workflows that meet the changing needs of the digital color marketplace. Fiery provides robust networking, excellent color management, maximum productivity and open variable data workflow. Fiery Color Servers meet the specific application needs of virtually any digital operation while offering the necessary integration into the broader offset workflow. For the graphic arts service provider who is either adding digital to his or her portfolio of services or seeking better integration between digital and offset workflows, Fiery offers a number of key advantages, including EFI’s history of dedication to the support of industry standards, long-term relationships with the vast majority of digital printing equipment manufacturers, and companion workflow solutions from EFI and its partners that streamline workflow integration for rapid deployment and reliable performance.

Changing Customer Expectations

Meanwhile, along with the environment of change in the graphic arts industry, customers are not standing still, either, and their expectations are changing as well.

The ever expanding role that the Internet and other digital communications media play in our business and personal lives today has created a cultural shift—some would say a disruptive shift—in our expectations.

• We have become increasingly mobile and untethered.
• We are able to accomplish many activities and tasks anywhere, anytime, 24/7.
• We are becoming used to a self-service model, whether we are in the grocery store, buying books online, tracking express shipments, or checking flight schedules, but we also demand the ability to receive a high level of customized, personalized service when self-service doesn’t meet our needs.
• And we are less willing to wait for products and services than ever before—we want things now.

To be successful, graphic arts service providers must think about the end-to-end customer relationship, structuring services in such a way that their companies are easy to do business with, can meet increased demand for anytime/anywhere access and faster turnaround times, yet still offer quality printing at a reasonable price. And there are a few critical success factors that are required in order for the graphic arts service provider to succeed in achieving these goals:

• A digital workflow that extends to—and integrates with—the business processes operating within the customer enterprise.
• A 24/7 self-service capability allowing customers to order, manage, track, review and collaborate upon their business communications projects.
• A blended production approach that leverages the strengths of both digital and offset printing processes.
• Electronic delivery options that allow the customer to easily choose among a number of delivery options across the business communications life cycle.

The graphic arts service provider who is able to respond to this changing business environment by deploying a hybrid set of services and solutions designed to meet emerging customer needs and requirements stands to reap significant benefits. This is the future of our industry, and those who embrace it will thrive.

Meeting Today’s Challenges

It is vital that the graphic arts service provider understand the issues and trends impacting the industry as a result of changing customer needs and expectations. It is only in this way that a production print operation can ensure that it is well positioned to meet the market challenges of a fast-paced and competitive world.

Key Trends Impacting the Industry

There are four key trends that have had an increasing impact on the graphic arts industry, all of which are likely to continue to grow in importance:
• Shorter runs
• Decreased cycle time
• More customization
• Electronic delivery as a viable alternative to print

The Perfect Storm

In a sense, the convergence of these four trends has caused a “Perfect Storm” for the graphic arts industry. Any one of these trends would have been enough to wreak havoc with traditional operating processes, but combined the impact has been—and will continue to be—substantial. Recognizing the effect of these disruptive forces, and deploying the appropriate measures to restructure both operating processes and customer interfaces, is critical to the success of the graphic arts service provider of the future.

Digital Is Here to Stay

In order for the graphic arts service provider to remain competitive, there is a need to increase the digital content within the work process. This applies to workflow—or the processes involved with accepting, producing, delivering and billing for a print project—as well as equipment and customer interfaces. This is not an optional strategy, and the “Perfect Storm” is not going to go away. But there are a wide range of options available to the graphic arts service provider in undertaking this digital migration.
Putting the Pieces Together: EFI Workflow Solutions

Digital workflows, improved productivity, more customer connectivity, increased access—these are a few of the key elements the graphic arts service provider must take into consideration in ensuring an adequate portfolio of products and services to meet the needs of today’s print buyer. Without a doubt, the graphic arts service provider will need to assemble components from a number of different vendors, and in so doing must ensure that components will interoperate with each other as effectively—and with as much automation—as possible. Suppliers should be expected to:

- Demonstrate strong support for industry standards
- Be able to interoperate in a multivendor environment
- Understand the requirements for both offset and digital printing technologies
- Have a strategy in place to stay current with emerging trends and technologies
- Comprehend the needs of both graphic arts service providers and their customers as they strive to deliver effective business communications.

EFI (www.efi.com), a leading supplier to the graphic arts industry, recognizes the need for a customized approach and offers solutions designed to fit into existing workflows so that graphic arts service providers can more easily migrate to a fully digital and integrated world. The latest in EFI’s Fiery technology delivers fast, industry-leading, adaptable workflows that connect to and interoperate with the widest range of vendors in the market. By drawing from its own and its partners’ technologies, EFI delivers high-performance, economical digital workflow solutions that are flexible and scalable, allowing the graphic arts service provider to easily develop customized digital workflows to meet the needs of even the most demanding customers. Because EFI solutions are standards-compliant, they fit easily into existing workflows allowing the graphic arts service provider to deploy a phased, rational approach to increasing digital capabilities.

Fiery

Long a staple in the design community, EFI Fiery servers deliver exceptional control over the color printing process. Combining Fiery’s unmatched color output and extensive variable data printing support places the Fiery at the forefront of the next generation of digital color servers. And the Fiery Graphic Arts Package includes a number of production automation and workflow management features that further support the seamless integration of digital and offset workflows.

Fiery Integration with Existing Workflows

Two manufacturer-specific workflows commonly implemented in the conventional graphic arts operation are Brisque and Primergy from Creo.

Brisque workflow is most commonly deployed in Computer-to-Plate (CTP) and Computer-to-Film (CTF) applications. In these environments, a Fiery workflow is most likely to be deployed in parallel with the Brisque workflow. This parallel implementation makes it easy for the graphic arts service provider to handle a blend of short-run digital and longer run offset work, with Fiery as an output option from Brisque. Figure 1 depicts a typical Fiery deployment within the context of a Brisque workflow.

“It’s our vision to have Fiery-driven color printers in the offices of our major customers, so they can design documents, proof them in their offices, and send the documents via the Internet directly to our Fiery.”

Lewis Eigen,
President, Social & Health Service Ltd.
Rockville, MD
Most Brisque shops have purchased and will be used to the “PS-Export” and “PDF to go” options to get the best quality output when operating in a mixed technology environment and will find the integration of a Fiery workflow for digital output to be a natural extension of existing workflows. The incorporation of Fiery’s Hot Folder functionality automates any file conversion activities that may be required, eliminating the need for operator intervention when work is directed to a digital output device.

Prinergy, on the other hand, is a workflow intended as an umbrella process for the entire shop. The most common output from Prinergy is TIFF or separated PS, PDF or TIFF, with PDF including color control and trapping information being the most common. Figure 2 depicts an integrated Prinergy/Fiery workflow.
Again, Fiery Hot Folders can be utilized to automate any required file conversions, and Fiery’s AutoTrapping, used in lieu of Prinergy’s trapping capability, results in faster processing and files that are engine-optimized for the best quality regardless of print engine manufacturer. Fiery can also serve a valuable role as a proofing step in the production process, with the separated PS output from Prinergy being directed to Fiery’s Combined Separations feature to clearly show the trapping effect. Flattened TIFF output can also be ingested from Prinergy into the Fiery and will accurately show the effects of trapping, although this can often result in large file sizes.

Thus by integrating a Fiery workflow into current operations for both digital output and proofing, the graphic arts service provider can take advantage of the advanced functionality of Fiery with the Graphic Arts Package. Not only will this leverage existing investments, but it will also ensure exceptional productivity and the highest possible quality of output to digital print devices from a wide range of manufacturers. Based on Fiery’s unparalleled support of industry standards and the wide range of in-depth partnerships and alliances in which EFI is engaged, this seamless integration and access to advanced digital capabilities comes with virtually no disruption to existing workflow, regardless of the manufacturer or manufacturers already in place in the shop.

**Summary**

Dramatically changing times call for dramatically different approaches. As our service provider quotes demonstrate, business growth is possible even during difficult and turbulent economic times for those who adapt to new market requirements.

Central to the success of today’s graphic arts service provider is the deployment of an increasingly digital workflow that can span products from multiple vendors and a wide variety of production technologies. With a digital production workflow based on open standards—rather than proprietary, closed solutions—comes the opportunity to offer improved customer interfaces, increasing productivity for both customer and service provider through implementation of a 24/7 self-service capability, backed by exceptional customer service when in-person assistance is required. Eliminating unnecessary rekeying of data, ensuring a maximum level of automation, and building reliability and predictability into the process are the hallmarks of the successful graphic arts operation of the Twenty-First Century.

By carefully selecting the components of a new digital workflow from partners such as EFI that can be easily integrated into existing work processes, the graphic arts service provider can ensure a scalable, flexible infrastructure that will offer a platform for healthy business growth. The flexibility offered by a Fiery workflow fits the model of the successful graphic arts service provider of the future.
About EFI

EFI® (www.efi.com) is the world leader in digital imaging and print management solutions for commercial and enterprise printing. EFI’s award-winning technologies offer document management tools from creation to print, including high fidelity color and black and white Fiery® print servers that can output up to 2000 pages per minute; powerful production workflow and print management information software solutions for increased performance and cost efficiency; and an array of business-critical enterprise and mobile printing solutions. EFI maintains 25 offices worldwide.

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