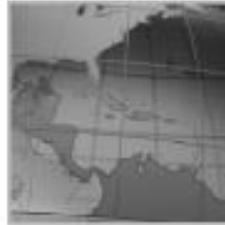


# White Paper



May 2017

## Optimizing Document Processes in Key Areas:

*How New Technology, Strategies Capitalize on the Trends*

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## Introduction

Documents are an integral component to the successful operation of an organization. Whether in hardcopy or digital form, they enable the communication, transaction, and recording of business-critical information.

To ensure documents are used effectively, organizations are encouraged to continually evaluate and improve surrounding workflows. This may involve automating elements of document creation, securing the transfer and storage of information, and/or simplifying the retrieval of records and the data contained within. These types of enhancements can save time, money, and frustration.

This white paper will discuss top trends and requirements in the optimization of document-related business processes as well as general technology infrastructures for document management. It will also address how some office technology vendors have reacted to these trends to guide their design and development of products, solutions, and services.

## Document Workflow Trends for the Demanding Business Workforce

Keypoint Intelligence/InfoTrends, a leading provider of market intelligence for the digital imaging industry, conducts primary research on the top trends and requirements for office document workflows. As increased competition and digitization take hold, organizations are seeking innovative solutions to address new, in-demand business needs. They expect hardware and software solutions that are not only optimized for office productivity, but also easy to use. They require technology that is mobile-enabled yet secure—allowing remote and virtual workers to easily conduct business while keeping information protected. Color printing is also taking on a greater role in the office environment, as its growing affordability facilitates high-value output. This whitepaper explores these trends and requirements in greater detail below.

### Ease of Use

Ease of use is a growing requirement of office technology users, driven by norms within consumer settings. Workers see how easy it is to use smartphones, tablets, and other personal technology, and expect business technology to function similarly. Intuitive interfaces, advanced settings, and multi-operating system support are just a few of the features they desire (and increasingly demand). They also value products and services with uncomplicated customization capabilities and widespread compatibility.

Another expectation is easy *access* to the right productivity tools. Employees can access their mobile devices, personal cloud storage accounts, and other cloud accounts (e.g., Netflix, Uber, Airbnb) at the drop of a hat: why shouldn't business technology be as painless? Businesses favor technology partners that are responsive to their needs and

requests, knowledgeable about the available solutions, and capable of quickly providing the right mix of options.

**Office Productivity**

Another top trend in office environments is a focus on improving productivity. As the force of globalization and competition grows, organizations find themselves needing to do more with less. They must become more competitive, but may not have more resources to make this happen. They can achieve improved productivity through new and affordable technology that continues to be faster, more feature-rich, and more reliable. Keypoint Intelligence/InfoTrends research shows that speed is the top driver of using various shared print devices in the United States.

**Table 1: Top Reasons for Using Various Print Devices**

Device Type	Top Reason	#2 Reason
Shared color laser MFP	Speed	Scanning/copying/faxing capability & two-sided printing (tied)
Shared color inkjet MFP	Speed	Scanning/copying/faxing capability
Shared B&W laser MFP	Speed	Two-sided printing
Shared color laser single function device	Speed	Print quality
Shared color inkjet single function device	Color capability/distance away from me	Speed
Shared B&W laser single function device	Speed	Distance away from me

*Source: Future of Office Printing (Keypoint Intelligence/InfoTrends, 2016)*

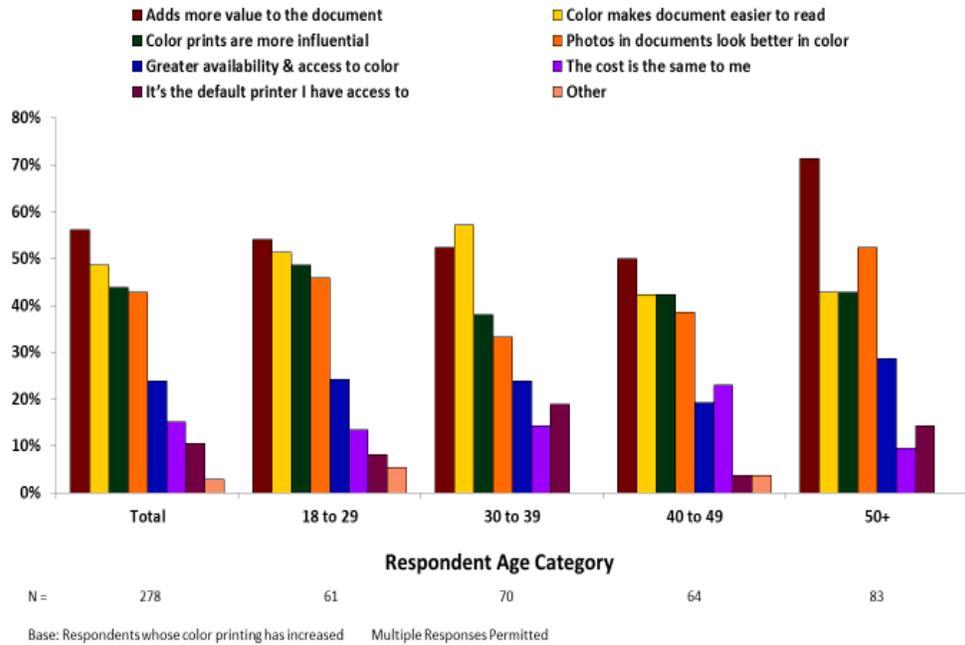
With technology becoming more affordable, access to time-saving tools has improved significantly. In addition, a wider range of solutions exists for optimizing business processes—including digitization technology, document management systems, and software for specific industries. Sometimes these solutions are integrated into one device (as is the case with business Multi-functional Printers [MFPs]), contributing to even greater productivity. And these tools can frequently be procured on a yearly or monthly basis—allowing organizations to adjust their technology to be in sync with productivity needs.

**Growth in Color Printing**

Recent Keypoint Intelligence/InfoTrends research found that within the United States, one-third of business printing is now in color. This number has spiked since color printing became affordable in the office (and at home) in the mid-1990s. Over time, the price of color supplies and printers/MFPs has dropped—making color printing more

affordable and accessible to a greater number of businesses. Color is most frequently used for sales, marketing, and client services applications (e.g., printing of brochures, presentations) where color delivers added value. The chart below shows factors driving increased “required” color printing at work (i.e., color printing that is an established part of a business process). Results are similar for “optional” color printing.

**Figure 1: What is driving the need for more required color printing at work?**



Source: Future of Office Printing (Keypoint Intelligence/InfoTrends, 2016)

### Managing a Mobile Workforce

Organizations are focusing on managing a growing mobile workforce where “mobile” refers to the ability to easily conduct business from an unlimited range of locations. Employees, clients, and partners now expect anytime, anywhere access to information.

They also increasingly require a consistent mobile experience across devices. For instance, using a content management service like SharePoint® Online should be similar across a Microsoft® laptop, Apple® iPhone®, and Android™ tablet computer. This helps ensure workers productively use these services regardless of the device at hand.

Mobile users also benefit from easy access to the latest mobility offerings. This includes new and continually integrated versions of mobile and cloud applications, device features and Internet-connected technology offerings.

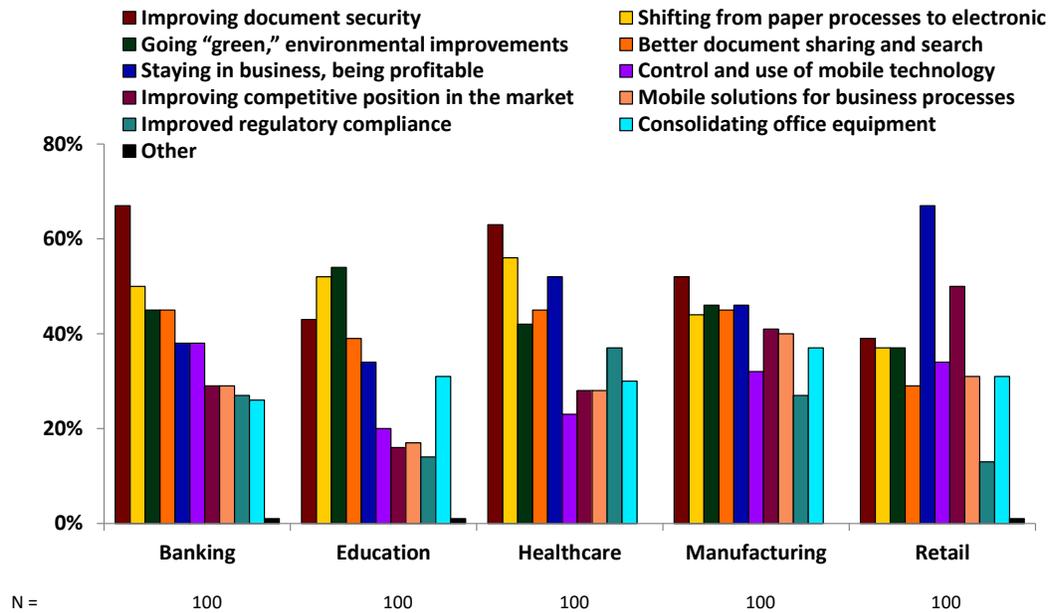
### Emphasis on Security

As illustrated in Figure 2, Keypoint Intelligence/InfoTrends research continues to show that improving document security is a chief business priority among corporate IT

decision makers. The importance of security tends to grow as organizational size increases, reflecting the greater tendency for a security breach in an organization with more sites, employees, and data.

Security is also particularly pertinent in tightly regulated industries—such as healthcare, government, and finance—that commonly handle confidential personal information. Laws and regulations governing these sectors require that information be highly protected.

**Figure 2: Which of the following are business priorities for your organization this year?**



Source: *Future of Scanning (Keypoint Intelligence/InfoTrends, 2015)*

Widely publicized reports of security breaches in government agencies and corporate entities have contributed to the growing focus on securing IT infrastructures and workplaces in general.

## How the Document Technology Industry is Capitalizing on these Trends

### Ease of Use

Certain office technology vendors have made ease of use a core component of their product development and consulting strategies. They focus on the type of technology that is most needed as well as being user-friendly, such as compact A4/letter-legal-sized print devices.<sup>1</sup> Companies overwhelmingly print on letter-sized paper; as such, more expensive A3 products<sup>2</sup> may not be required.<sup>3</sup> Focusing on more relevant, user-friendly

<sup>1</sup>These devices print on 8.5" x 11" or 8.5" x 14" sized paper.

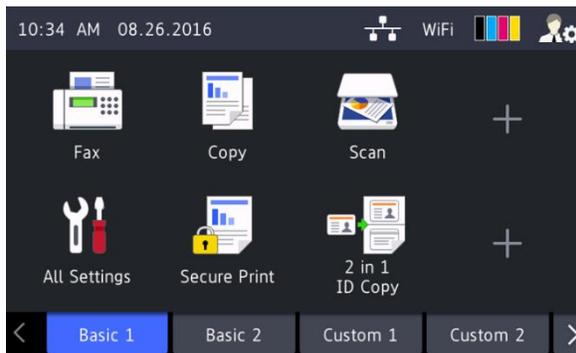
<sup>2</sup> These devices print on 11" x 17" paper.

<sup>3</sup> The relatively low use of finishing options like stapling and hole punching also reduces the need for A3 devices.

technology—in addition to having more devices closer to users—can reduce cost and frustration while increasing productivity.

Usability-focused vendors also offer intuitive and flexible business applications that incorporate the latest best practices in design and interactivity. Their MFP apps can easily be accessed, viewed, and selected via the new generation of tablet-like touchscreens. The large size of these touchscreens (e.g., up to 7 inches in some cases) as well as their responsiveness simplify application use. Some vendors have also incorporated wide-ranging device settings, customization capability, and compatibility into the structure and capabilities of the interface, MFP applications, and compatible mobile applications.

**Figure 3: Example of a 7” Touchscreen on a Multifunction Printer**



For instance, the open platform nature of select new model MFPs allows organizations to integrate a wide range of business workflow applications into the devices via the Control Panel. As another example, the best mobile printing apps can be used across mobile operating systems and feature such settings as automatic search for supported devices on a local wireless network, the ability to edit previewed images, and updates on the printer’s status (e.g., ink/toner volume, error messages).

### Office Productivity

Select document technology vendors have also optimized their devices, solutions, and consulting services for office productivity. In addition to focusing on prioritized A4 print technology, some vendors help businesses determine physical strategic device placement for maximum productivity within office environments of different sizes.

The fact that certain vendors provide a wide range of information technology choices including laser printers, inkjet devices, label printers, and scanners adds to the ease of creating a “balanced deployment” of document technology. This establishes the right mix of document output and capture technology to enhance document workflows and improve productivity.

This fleet optimization approach may involve replacing costly A3 printers with pods of cost-efficient A4 printers in the areas where they are most needed. Spending less for more devices provides cost, time, and productivity benefits. Furthermore, high yield cartridges

(e.g., cartridges with up to 20,000-page yields) delivering a low cost per page drive down printer running costs—another contributor to enhanced productivity.

**Figure 4: A4 Print Devices Pod**



Print technology can also achieve productivity through performance. For example, the most productive devices are reliable, fast, and consistent. They have a simplicity and robustness of design that helps protect against breakdowns.

Productivity is also achieved through a device’s print speed, as well as flexible and scalable paper handling capabilities. Figure 5 below shows how different paper tray options can increase a device’s capabilities.

**Figure 5: Laser Printer Configurations**



Business software and applications further extend the functionality and effectiveness of print devices. These include proprietary and third-party solutions that improve processes and help save money. Bridging the paper and digital worlds, feature-rich document management solutions help ensure digital content is properly organized and easy to retrieve. This cuts down on time spent handling files, especially in paper-intensive industries, departments, and organizations.

Other print/MFP-compatible solutions include tools for print management (i.e., tracking and managing print use to gain transparency, change habits, and help reduce costs), scan to cloud functionality, and mobile printing via app or the cloud.<sup>4</sup> Some of these solutions are particularly beneficial for certain industries, such as scan to Google Drive™ and support for Chromebook™ printing within education.

### **Growth in Color Printing**

Leading imaging companies are addressing the growth in color printing in various ways. Some are improving the color print quality of their printers and MFPs to enable higher-value output. One vendor recently introduced an improved toner that produces brighter and more vivid colors as well as higher resolution. This vendor also enhanced its color profile software to select more vivid colors than the previous-generation software. Another approach is introducing color ink, toner, and print devices that are even more affordable than previous generation offerings such as high-performing business color MFPs that are compatible with high-yield toner (e.g., 9,000 pages) that can now be purchased for less than \$1,000.

### **Managing a Mobile Workforce**

Mobile device connectivity is another key trait of on-trend print technology. Vendors attuned to the explosion in smartphone and tablet use have enabled printing and scanning via mobile devices. For instance, they have introduced dedicated apps that allow mobile users to print and scan with just a few clicks and eliminate the need for a PC or laptop for printing.

Many print devices support other methods of mobile print as well, including Apple AirPrint®, Google Cloud Print™/Chromebook printing, Android printing via print plugin (i.e., vendor-specific print service, Mopria®), and Wi-Fi Direct®. The scan component can control scan settings, initiating scan jobs on compatible MFPs and scanners.

Mobility is also promoted through printer-based cloud technology. Some vendors have linked their MFPs to commonly used cloud services, such as Dropbox, Evernote®, and Microsoft OneDrive®. Via the printer/MFP touchscreen, users can scan to and print

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<sup>4</sup> Mobile printing is defined as the practice of sending a print job from one's mobile device (i.e. smartphone, tablet computer, or lightweight laptop) to a printer or multifunction device.

directly from these cloud services. Some vendors offer additional cloud technology, such as fax forwarding to email, that further improves mobile accessibility to documents.

**Figure 6: Cloud Services Connected to Select Print Devices**



The best mobility solutions are also defined by their compatibility across print devices and mobile operating systems. The price or class of the device does not matter, demonstrating that the vendor is committed to enabling mobile functionality for *all* users. This is a compelling value proposition that distinguishes these kinds of portfolios from certain competitive offerings.

### **Emphasis on Security**

Leading vendors have responded by offering comprehensive security features and functionality for their print devices. For instance, printer access may be restricted to only those individuals in the organization's active directory with a pin code or password, and/or using Near Field Communication/tap-to-authenticate technology via a mobile device.

Beyond user access security, print technology may protect documents in transmission. For instance, scan to private cloud and encrypted scan to email capabilities keep records and data safe when they are being routed off site.

The ability to limit functionality is another key element of a winning print security strategy/program. Restricting access to functions like PC print, USB direct print, copy, fax, and scan or locking down capabilities entirely, including MFP functions and wireless capability, at the user level can deliver increased safeguards. Some businesses may prefer to remove wireless capability for added security.

Some vendors go even further to promote security through the encryption of data sent to the printer, signed/pin code PDF capability, and advanced protocols for specific industry and compliance requirements. Furthermore, the lack of hard drives on select print devices dramatically reduces the risk of a data breach as the latent confidential information that is stored on a printer/MFP hard drive can be accessed and used for unauthorized purposes.

## **Case Study: Brother's Business Solutions Portfolio and Capabilities**

This case study discusses a recent business technology implementation that dramatically improved ease of use, productivity, efficiency, and cost savings within a large retail organization and features products and solutions from Brother International Corporation.

### **Background**

The large retail customer had multiple brands of printers, but no clear protocol for supporting these devices with technical servicing. The customer was substantially overspending on printer supplies, as well as facing challenges getting the right supplies to the right locations. Another obstacle was configuring multiple cash registers to print to one printer.

### **Client Needs**

The customer needed help finding a solution that would enable employees to print from multiple cash registers to one print device. It also required a clear process for supporting stores and print users from a technical standpoint, as well as a means for controlling toner spend.

### **Brother Solution**

Brother worked with its reseller partner to design a solution that included one model of business laser printer (HL-L6250DW), special pricing, and help from the Brother Special Solutions Team (SST). The reseller provided a managed print services (MPS) program that included PrintFleet for capturing toner yields and page counts. This proactive approach allowed supplies to reach end users at just the right moment.

The Brother SST played an instrumental role during the planning and implementation stages. They created custom print drivers for the retail outlet, enabled printing from multiple registers, and helped address issues during product setup and use.

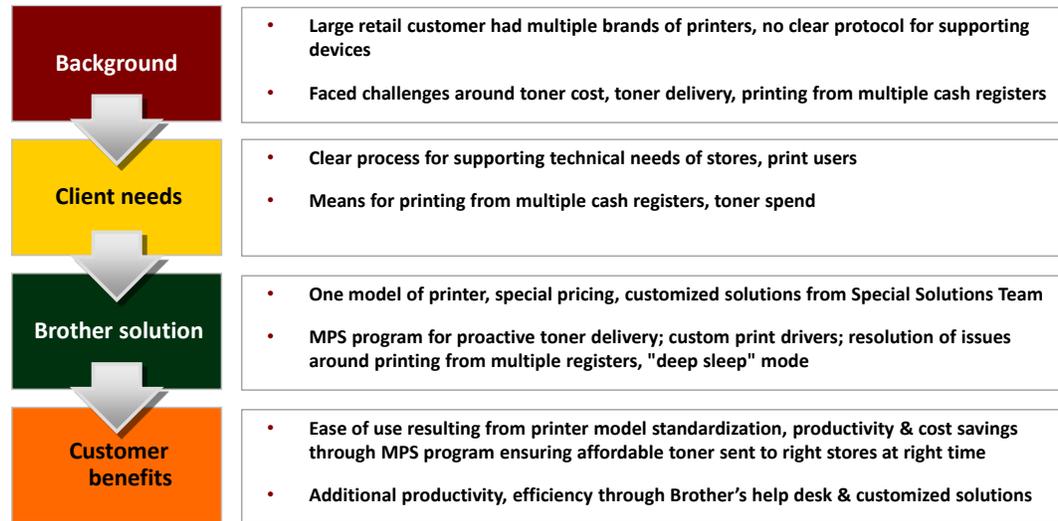
For example, they discovered that some printers were going into a “deep sleep” mode when they needed to be used. It appears that associates had inadvertently taken them off the network by pressing their Wi-Fi buttons. The Brother SST created a firmware upgrade that disabled the Wi-Fi feature to resolve the “deep sleep” issue that was pushed out to all store locations.

### **Customer Benefits**

By standardizing on one select printer model, and related supplies, the customer gained benefits around ease of use. Productivity and cost savings were achieved through the new managed print services program, which ensured that the standardized and competitively priced toner was sent to the right stores at the right time. The customer also gained efficiency and productivity through Brother's help desk service, as well as customized

solutions spanning the planning, implementation, and use stages of a balanced technology deployment.

**Figure 7: Case Study – How Brother’s Business Solutions Portfolio Capabilities Address Top Office Technology Trends**



### What to Look for in a Document Imaging Technology Provider

Businesses in the market for document imaging technology are encouraged to seek out a provider that exhibits the following characteristics. These characteristics can help ensure they are receiving the best value for their money.

- **Solutions-minded:** The best providers take the time to understand the individual customer’s needs and challenges, before proposing a solution.
- **Innovation-driven:** The ideal provider is well versed in today’s technology trends (existing and emerging), incorporating them into their product and service portfolios for maximum client satisfaction and productivity.
- **Partner-oriented:** A good provider is not just a technology vendor but an ongoing partner that will support a business as new requirements and initiatives arise.

### Keypoint Intelligence/InfoTrends’ Opinion

Documents help organizations run smoothly and effectively; as such, it’s important the processes around them are continually improved. This means continuously optimizing these workflows for enhanced ease of use, productivity, color usage, worker mobility, and security—all key areas of focus for today’s organizations.

Certain office technology and solutions providers have recognized these top trends, and allowed them to shape their product development and consulting initiatives. Through the right combination of hardware, software, and services, they enable organizations to

efficiently and cost-effectively solve business problems, enhance processes, and/or create new business opportunities for customers.

Keypoint Intelligence/InfoTrends believes that organizations looking for a more focused approach to document management would benefit from working with these kinds of vendors. They can help them optimize their workflow processes and practices to help resolving critical business challenges.

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