HP Managed Print Services solutioning methodology

Table of contents

Many organizations launch initiatives to increase the efficiency of their imaging and printing environment—only to quickly find that maintaining those improvements is the real challenge. Sustainable, long-term efficiency gains require that imaging and printing be approached as part of your organization's overall IT strategy.

"Like most businesses, we had to cut back and become very lean when the recent business downturn hit. Without HP being here, a lot of things might have fallen into the cracks. But we've been able to lean on the expertise of HP and its resources to assist us. It's been a huge benefit to have HP play a continuing role here."

—Frank Arvidson, senior manager for IT customer service, United Stationers, Deerfield, Illinois

Developing a sustainable enterprise imaging and printing strategy

It takes more than technology to reach and maintain that optimal state.

A growing number of organizations are learning how to get the most out of their imaging and printing investments. They are taking a more strategic approach to acquiring, managing, securing, supporting and disposing of the assets involved in printing, copying, scanning and faxing. They have right-sized printer fleets, refreshed copiers with multifunction devices (MFDs), educated end users and embraced networking technologies. They have even started to automate document and information workflows.

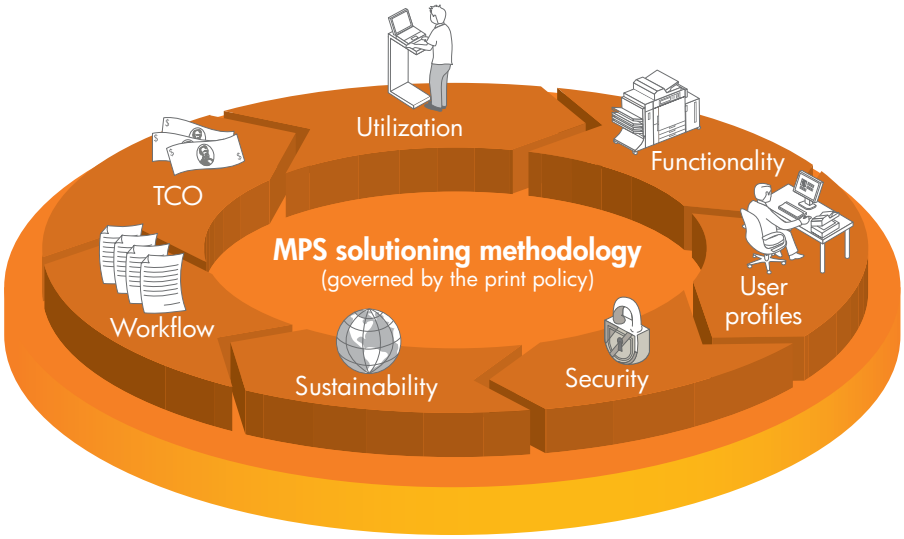
In these new and improved environments, organizations often discover that it's not enough to pay attention to which technology, services and solutions are deployed. They must also remain attentive to how they are managed over time. When improvement projects are deployed without policies or governance, the imaging and printing environment can quickly devolve back into a sub-optimal state.

Plan ahead to sustain imaging and printing investments.

HP works with organizations to help them realize the full benefits of optimizing their infrastructure and managing it over time. Our solutioning experience shows that establishing governance structures and documenting print policies early in the process increases the likelihood of end-user adoption and long-term success. The ability to adjust to evolving business conditions must be accounted for from day one. Documented print policies support the business by defining a set of guidelines that end users can understand, follow and adapt to. And they allow management to set clear goals for measuring and communicating progress.

This document explores the components and considerations that inform the HP Managed Print Services (MPS) solutioning methodology. Organizations looking for help in managing their imaging and printing environment should discover that the HP MPS solutioning methodology is flexible enough to adapt to their unique requirements—initially and over time.

Figure 1. HP Managed Print Services solutioning methodology



HP MPS solutioning methodology

The overall HP approach is to get the right number and types of devices in the right locations to address user needs—with the right print policies and governance in place to manage the environment over time. Because different organizations have different needs, a flexible solutioning approach that balances goals of cost reduction, productivity and end-user satisfaction is an important consideration. When designing the optimal imaging and printing infrastructure for your organization the following components need to be evaluated, both individually and as an integrated system:

- Utilization
- Functionality
- User profiles
- Security
- Environmental sustainability
- Workflow
- Total cost of ownership (TCO)

The sections that follow describe each of these solutioning components and how together they form the basis for a successful strategy and ongoing optimization.

Utilization

Utilization should be a primary driver informing the effective design of your new imaging and printing infrastructure. Achieving the right combination of technology (hardware and software) and services at the right time and place with the right amount of capacity and efficiencies is an outcome that most organizations desire. Unfortunately, many technology and service recommendations do not take utilization fully into account.

Once an organization identifies the value of a specific technology or service, decisions are made on acquiring those capabilities. In many cases, that technology or service is designed to serve a continuum of capacity needs, which means that many organizations fall well short of effective utilization. For example, some studies reveal that the average multifunction device (MFD) prints around 8,000 pages per month. However, this is sometimes less than 25 percent of MFD capacity. And this underutilization results in a higher total cost of ownership (TCO).

User ratio, walk distance and process flow are used frequently as metrics for solution design. Although these metrics have value, they should be subservient to overall utilization. Here's why.

Bottom line

An effective output strategy begins with utilization as the primary goal, supported by strong links to all the other solutioning components. Maximizing the utilization of a technology or service lowers the cost per page and improves business processes, which translates into a lower TCO and increased customer loyalty.

User-to-device ratio

For the past decade, most output design strategies have been led by user ratios, where analysis calculates the average access to output based on how many users share a device. This approach is flawed in several ways. For one, a user has other output options that cannot be calculated into the user ratio, such as data center output, copy centers and off-site production sites like FedEx Kinko's or HP Virtual Print Center. In addition, these user ratios only reveal the median. Organizations have varying needs based on diverse user groups. While one large facility may follow a user ratio closer to the average, a smaller site or user group with different output needs might diverge widely from the average ratio, making it unrealistic to manage an environment based on this metric alone.

Bottom line

User ratios should be used to vet the output strategy and help ensure that end users have the access they need. User ratios should not be the sole determinant, but instead balanced with utilization to ensure optimal productivity.

Finally, different industries have different print intensities that generic user ratios don't take into account. For example, the print intensity and volume of a professional services organization are quite different than the intensity and volume seen in manufacturing. Despite these drawbacks, vetting an effective output design against user ratios helps to ensure that utilization alone does not create an adverse output strategy. An example of this might be where one environment has high-volume users, which would dictate more devices, yet the user ratio would protect an output strategy design from applying too many or too few devices for output.

Walk distance

A more recent trend of output strategy design is walk distance. Although walk distance is relevant to user productivity, it's easy to misinterpret. Again, end-user variability comes into play. Consider a high-volume user in marketing or finance compared to a low-volume user with fewer imaging and printing needs. The distance a high-volume user must walk to access a device impacts productivity much differently than the distance a low-volume user walks. Requirements specific to office and production printing needs should be factored in. And then there are security and compliance considerations, including pull or PIN printing. Other considerations include mission-critical print needs, workers with special accessibility needs or even building layout. Overall, walk distance should be a component of the broader design criteria versus a leading design strategy.

Bottom line

Use walk distance to help ensure productivity is maintained while utilization is maximized. In some cases, additional services or workflow solutions are necessary to meet the needs of users instead of simply locating devices closer to their cubes or offices.

Process flow

Placing too much emphasis on generic process requirements is another trap to avoid. Depending on the industry, there are unique process considerations. And yes, these are considerations that can be measured and benchmarked. But the relevance of process flow for the unique needs of an industry or individual user is often overly simplistic and counterproductive to an effective output strategy.

Functionality

Another approach that requires caution is the idea of standardizing on universal devices like MFDs. From a procurement perspective it's an ideal scenario. No matter where the end user is located (including mobile users), the MFDs offer the functionality to meet any unforeseen need. It also helps procurement leverage economies of scale around unit pricing.

This attempt to standardize, however, often results in "over solutioning" and is a poor strategy for addressing true usage needs. First, those added features increase manufacturing costs. An all-MFD strategy only works if you maximize utilization of each feature. Then there are the infrastructure costs associated with supporting these more-complex devices on the network. Each additional feature increases the chance of incremental service failure points. In short, acquisition cost and support can be negatively impacted. Instead, let's look at how functionality should be optimized in balance with documented usage trends. Figure 2 represents an example of typical user needs.

Bottom line

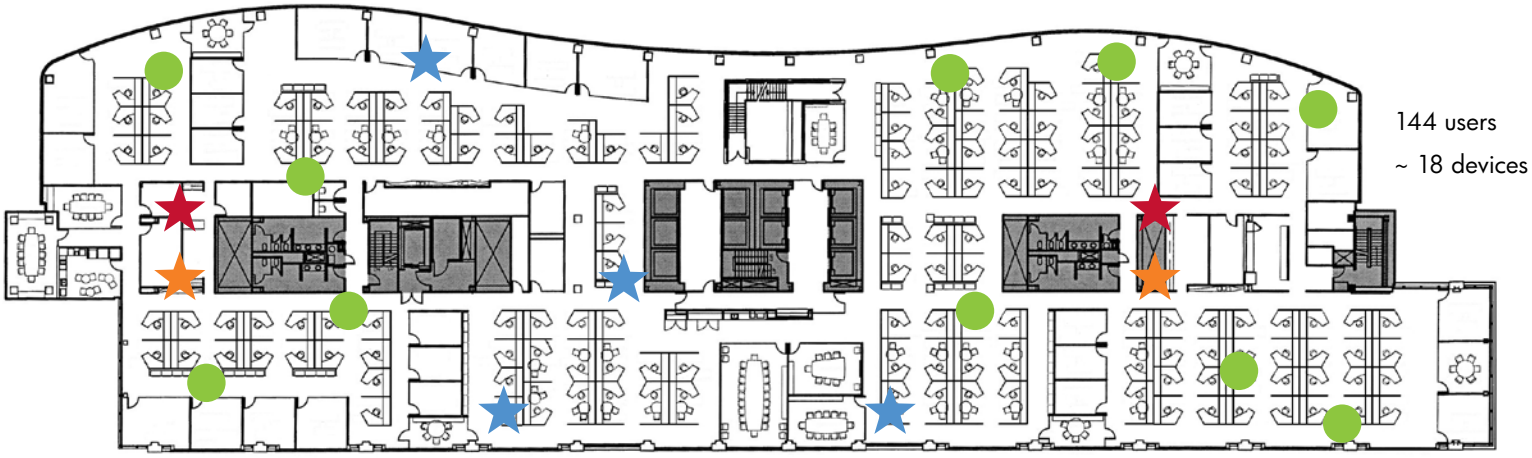
Standardizing on universal MFDs might simplify procurement, but it fails to take into account usage patterns and needs.

Based on this scenario, what decisions should you make in terms of access to color printing? 11x17 page printing? Finishing options? Each of these features has cost implications when designing the optimal imaging and printing environment. It only makes sense to standardize access to the most commonly used features and centralize access to lesser-used features. Then it's important to include management of change and end-user training to reinforce desired policies and behaviors. Figure 3 illustrates a sample floor plan based on the aggregate needs from Figure 2.

Figure 2. Typical functionality needs

Output type	Percentage of output	Comments
Print	67 percent	Access provided to all users.
Copy	30 percent	Copy volume can be further reduced by enabling access to digital originals.
Fax	3 percent	Fax volume can be further reduced with use of digital sending.
Color	15 percent	Color use is growing and needs to be better managed.
Finishing	17 percent	Understanding on-site versus off-site options can minimize the potentially higher costs of on-site finishing.
8.5x11	95 percent	Access provided to all users.
8.5x14	3 percent	This function should be centralized.
11x17	< 2 percent	This function should be centralized.
Number of jobs < 4 pages	67 percent	
Number of jobs 5–28 pages	18 percent	
Number of jobs > 28 pages	15 percent	Jobs usually require stapling/finishing.
Duplex	8 percent	Duplexing can significantly reduce the costs of paper usage.
Scanning	< 10 percent	Scanning use continues to grow, reducing printed pages. Decentralizing can accelerate this trend.

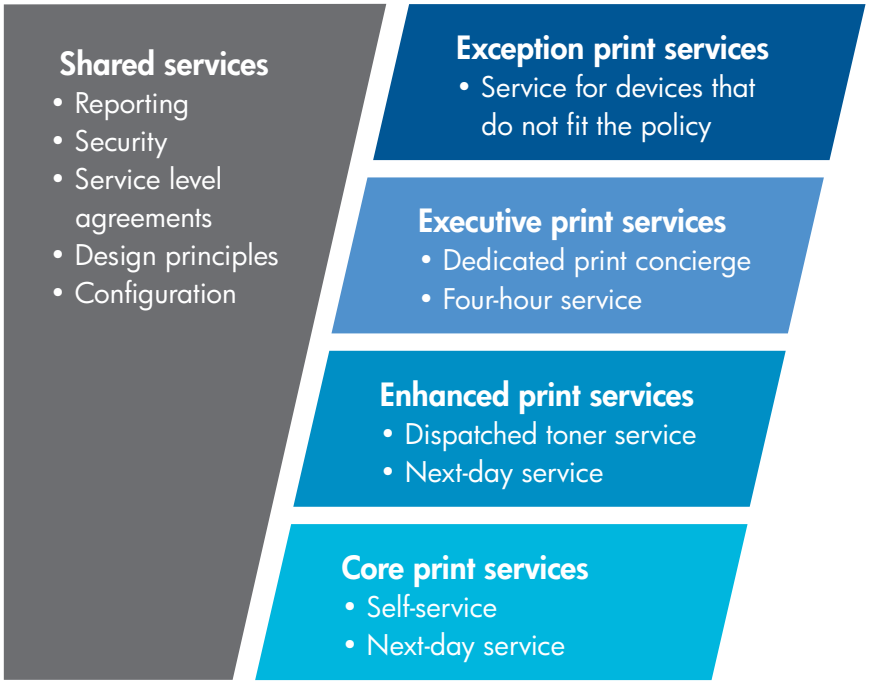
Figure 3. Sample floor plan based on typical uses



Print access
Color access
MFP
MFP with 11x17 access

- All users have access to print.
- Color access is less, limiting abuse.
- MFP access is less than print access.
- 11x17 access is centralized.

Figure 4. Sample printing framework showing how different user needs impact service levels



User profiles

Another common approach to output design is to simplify user support by standardizing service levels. But again, end users have different needs. Service levels provide the essential support required for maintaining productivity, but they should be balanced against utilization and functionality considerations. Developing and updating user profiles helps ensure that the right infrastructure is in place for evolving user needs.

Take this scenario, for example. To avoid missing project milestones or losing mission-critical applications, some organizations believe they need to maximize uptime by having on-site service technicians to address break-fix requirements or shorten problem resolution windows. These organizations may be asking for more than they need. For example, if a service technician is stationed at an average building (typically 500 to 1,000 people) to meet these requirements, the fleet that the technician would be supporting is typically less than 100 devices (assuming good design principles). Historically, HP devices average one service incident annually, so in this scenario the technician would be responsible for just 100 break-fix incidents annually. Unless that technician can be utilized for other buildings or other services (possibly requiring different skill sets), the service is dramatically underutilized.

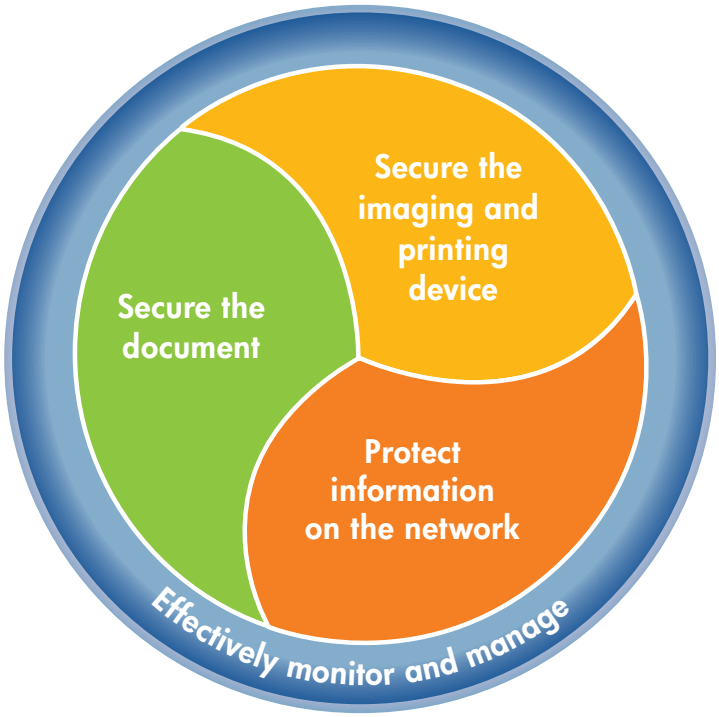
Another example involves designing copy center/production printing capabilities for an organization's building or campus. Is a full-service on-site copy center designed to meet the needs of higher-end functionality (e.g., posters, lamination, bindery) appropriate, or are off-site alternatives a better option (or some combination of on-site/off-site options)? Utilization methodology would suggest that decisions regarding copy center/production printing requirements be built on core, commonly needed requirements, using off-site alternatives to handle the more esoteric needs.

Figure 4 shows how HP MPS employs user profiles to design service levels that accommodate diverse needs. This approach also allows service levels to be managed and controlled more effectively as users may shift from one category to another over time. And while the focus is on core user needs, special executive needs and enhanced printing and device exceptions are taken into consideration as well.

Bottom line

Critical considerations when designing the best infrastructure for your needs are defining end-user requirements, building the right service levels and avoiding one-size-fits-all approaches.

Figure 5. The HP Imaging and Printing security framework



Bottom line

Information security, risk mitigation and compliance are key issues for organizations subject to an increasingly stringent regulatory environment. An effective solution must address each of these factors.

"We are not experts in printing, we are experts in tourism so our HP Managed Print Services contract is the perfect solution. Putting our imaging and printing needs in the hands of specialists like HP enables us to fully concentrate on our core business."

—Hugo Sousa, director, Technology Department, Turismo de Portugal

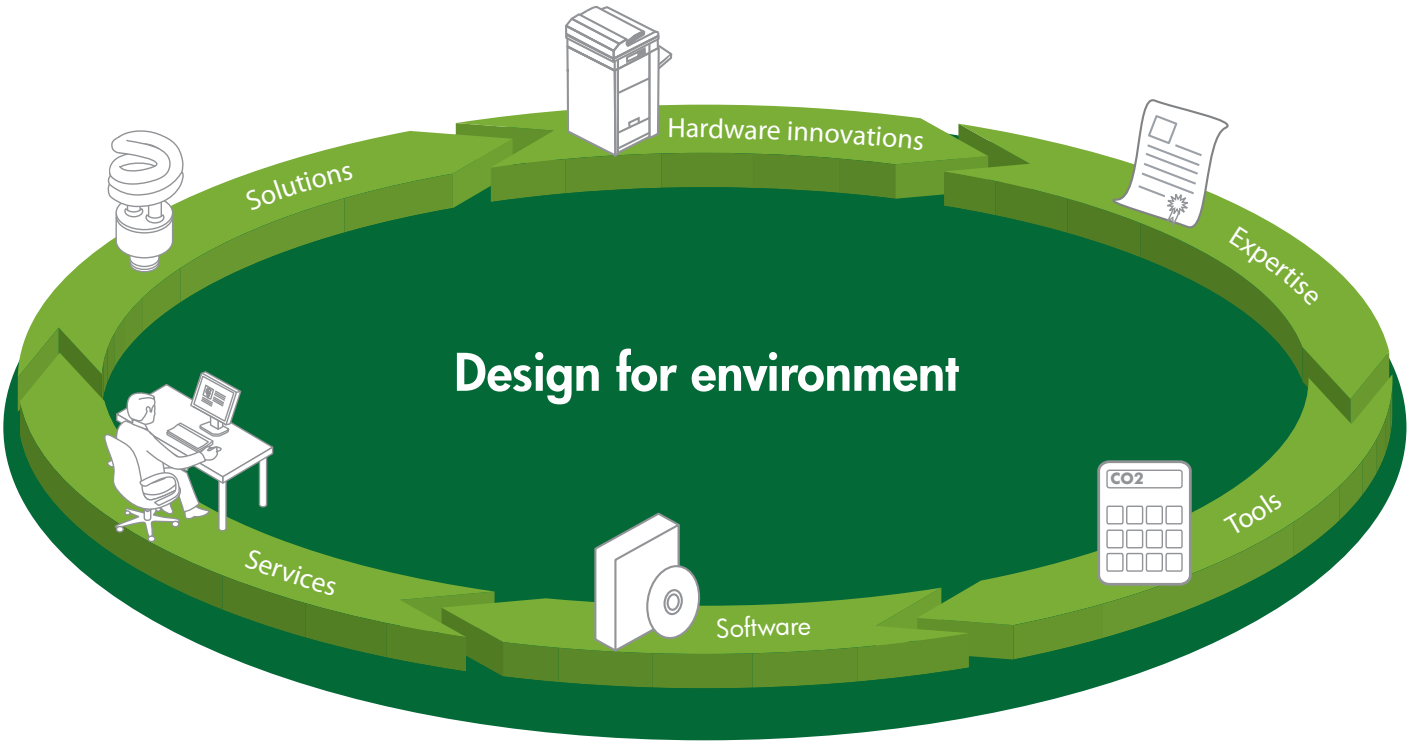
Security

Security is an essential component of a solutioning methodology. The computing power of an imaging and printing device rivals that of other peripherals on the network and serves as an on-ramp and off-ramp for critical workflow applications. Most organizations understand the need to follow corporate security policies for the data center, storage, personal computers and mobile devices—but may be less aware of the requirements around "smart" printers that are really more like smart clients on the network. Few fully understand what it takes to manage their imaging and printing assets. HP defines strategies that help organizations:

- **Secure your data**—Implement encryption, user authentication and other data-protection solutions to help ensure your data doesn't fall into the wrong hands at any time during the printing process.
- **Secure your imaging and printing devices**—Encrypt or erase data on your devices' hard disks and control access to your devices to help prevent unauthorized people outside, or inside, your office from accessing sensitive information.
- **Protect your printed documents**—Use secure trays to help protect your special paper and media from theft and tampering; use cutting edge toner technology to ensure document integrity and protect from unauthorized copying or altering.
- **Monitor and manage your printing fleet**—Track usage, audit practices, set defaults and control access across your entire fleet.

And increasingly, security considerations not only need to address printing that is done in the office, but also while employees are working at home and while they are mobile.

Figure 6. Reduce the environmental impact of printing while delivering better results.



Bottom line

Environmental sustainability is not only good for the planet, it makes good business sense.

Environmental sustainability

An effective output design should save energy and paper and lessen an organization's environmental impact. For example, consolidating multiple single-use devices to fewer, more energy-efficient multifunction devices can cut energy use and costs. (Although it's important to not overly standardize on MFDs as discussed earlier.) And the ability to easily digitize documents and automate paper-based workflows helps reduce paper use. Smart infrastructure management enables further carbon footprint reduction by customizing device-level energy and paper settings.

From a sustainability perspective, managed print services offer effective ways to cut energy consumption, reduce paper use, and simplify recycling and end-of-use disposal. Pre- and post-analyses of HP MPS customer engagements reveal energy savings of between 30 and 80 percent[1] and reductions in paper consumption in the millions of pages.

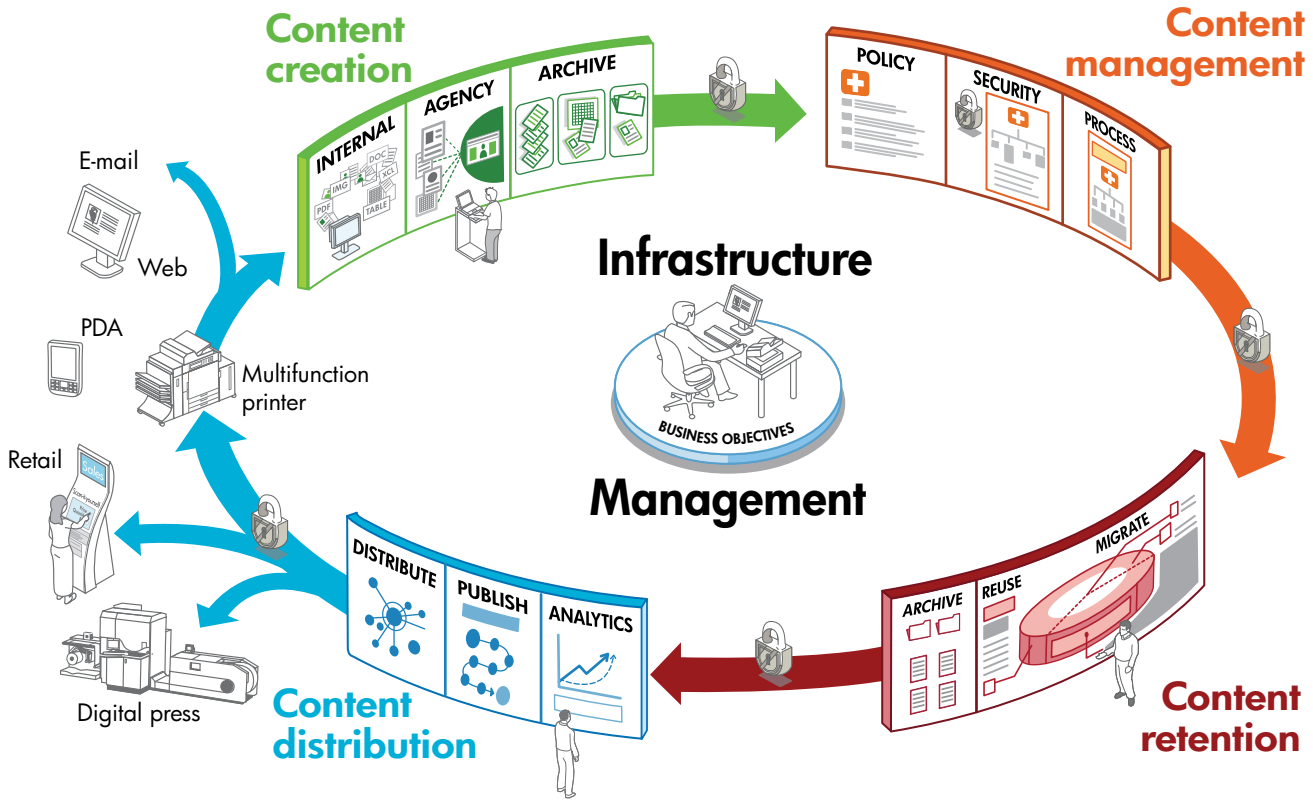
The **Walt Disney Company** implemented a new approach to managing print needs that would help align with environmental citizenship goals. **www.hp.com/go/disneymps**

Solution: Disney worked with HP to develop its Document Output Management Program using HP Managed Print Services.

Benefits:

- 59 percent reduction in the number of devices
- Reductions of more than 18 percent in energy usage
- Energy CO2 emissions reduction of an estimated 407,000 pounds over 36 months
- 100 percent recycling of toner cartridges through HP Planet Partners recycling program[2]

Figure 7. HP Information Management Ecosystem—bridging paper and digital workflows



Workflow

The average document moves from analog to digital nine times over its lifecycle. Improving workflows is one of the most effective ways to reduce waste and cost, and it can also increase productivity, reduce compliance risks and accelerate revenue—all good reasons why it plays a large role in the HP MPS solutioning methodology.

The HP MPS solutioning methodology can address transformational cost reduction and provide frameworks that can positively influence end-user behaviors and provide much-needed visibility to potential process improvements. Few providers can match HP's ability to comprehensively provide the capacity to compose, capture, route, manage, retain, deliver, secure and continually optimize the flow of documents and information internally within an organization, as well as externally with partners and customers. Figure 7 illustrates how the HP Information Management Ecosystem helps organizations bridge the gap between paper and digital workflows.

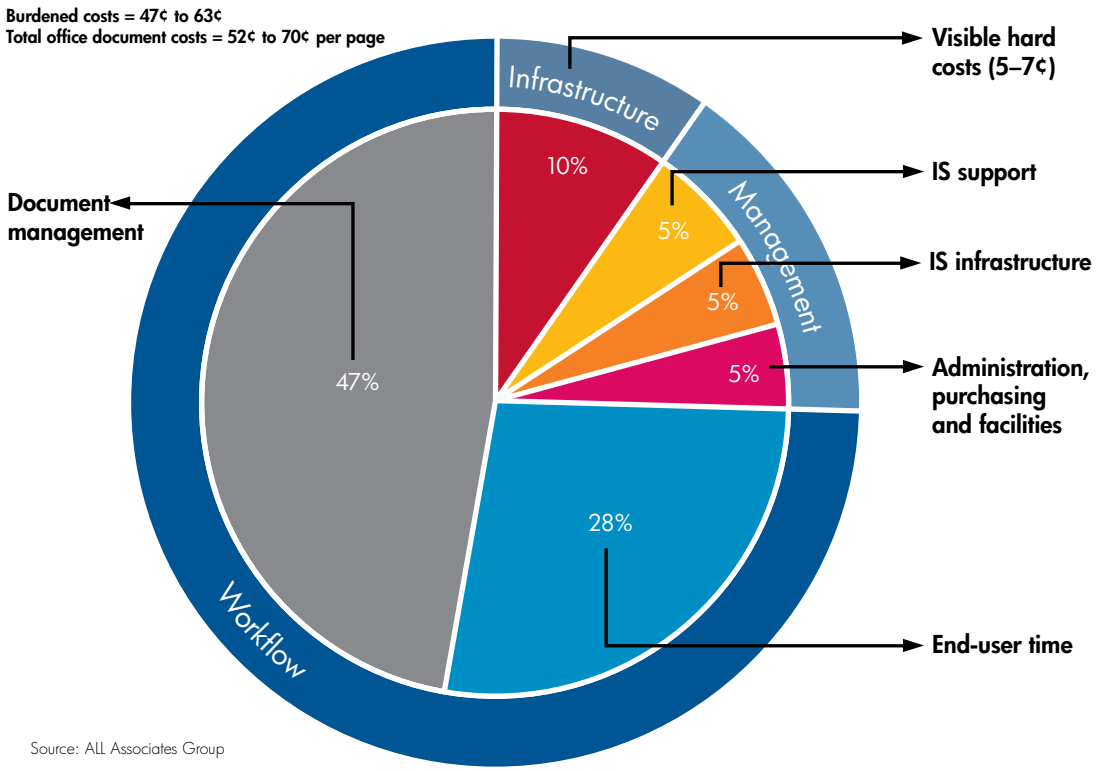
"Implementing a managed print solution is just the beginning. It creates a foundation that enables reductions in waste, introduces new business capabilities and streamlines workflow process."
—Drew Pawlak, director, Global Client Services Delivery, Merck

Merck

Business benefits:

- Significant cost savings from printer consolidation of previous 1:1 employee-to-printer ratio to approximately 12:1
- HP Education Services training instructors helped clients use and adopt new print features and functionality
- Integrated new capabilities within SAP deployment leveraging HP Output Server
- Executive sponsorship from the top of management chain for positive change management
- HP technology enables immediate and continued workflow improvements such as scan-to-e-mail, electronic expense management

Figure 8. The full costs of imaging and printing



Source: ALL Associates Group

Bottom line

Realizing the full potential and value of your imaging and printing investments requires understanding and addressing the true costs of imaging and printing—including utilization. Focusing on cost-per-page and other traditional metrics is simply not enough.

Total cost of ownership

Before entering into a managed print services engagement, it's important to understand the full spectrum of costs associated with imaging and printing. It can be tempting to focus on overly basic components of imaging and printing (hardware, supplies, support, financing) and cost-per-page metrics (the cost of putting ink or toner on a page). HP's approach is to make visible the true costs of print, the true value of driving out infrastructure and management costs, and the true value of automating paper-based workflows.

Again, utilization must be taken fully into consideration when calculating these true costs—something that many technology and service providers fail to account for. In order to take a more strategic approach to managing imaging and printing investments, HP encourages organizations to take a closer look at the costs of print as depicted in Figure 8. This more strategic approach takes into consideration the investments needed in those imaging- and printing-related hardware, supplies, software and services that have the most significant impact.

"When something works, you keep doing it. And if you can improve it even more, so much the better. That's why United Stationers not only renewed its HP Managed Print Services agreement after three years, but also expanded the number of facilities it covers."

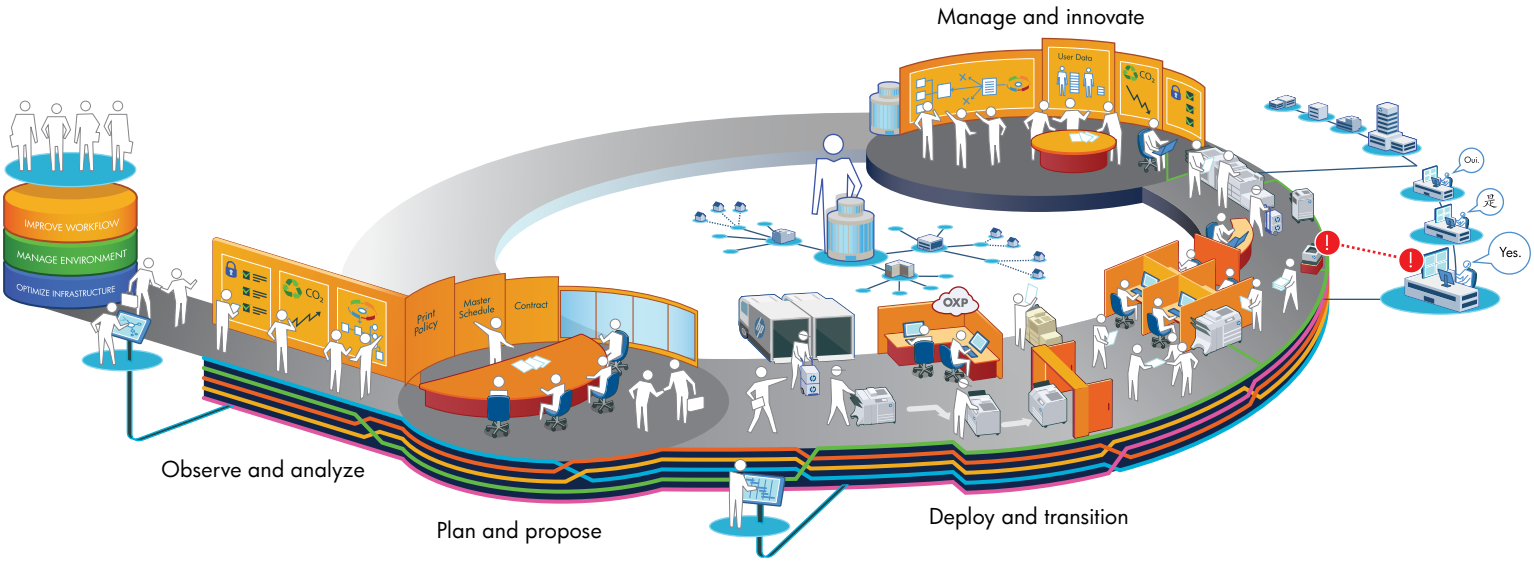
—Frank Arvidson, senior manager for IT customer service, United Stationers, Deerfield, Illinois

United Stationers

Business benefits:

- Cost savings of roughly 30 percent during the initial MPS agreement, and another 20 percent to 25 percent targeted savings goal during the second agreement
- Improved output quality
- Electronic workflows (scan-to-e-mail, etc.) enhance document distribution, storage capabilities
- Outsourcing management of central reproduction center to HP enhances efficiency

Figure 9. How we do it.



How we do it—a comprehensive approach

HP solutioning methodology for enterprise imaging and printing is grounded in our innovative technologies and process expertise, as well as our commitment to customer satisfaction and quality. Our approach consists of four phases:

- Observe and analyze
- Plan and propose
- Deploy and transition
- Manage and innovate

To be successful, your own improvement journey benefits from a consultative partnership with a provider that can see and deliver on the big picture. HP offers a technology-based, results-oriented consultative approach built on the premise that imaging and printing is an integral part of your IT strategy and architecture. We recognize the importance of incremental and continuous improvements that allow you to respond to change. And we can help support your requirements on a global basis, wherever you or your employees do business—corporate headquarters, branch offices, on the road or at home.

3M

Objective: 3M Australia wants to automate its imaging and printing processes with the aim of achieving a total electronic document environment.

Approach: The benefits for 3M Australia started with the consolidation of its fleet. HP and 3M worked together on a design and discovery exercise that established the workflow requirements. It has renewed the HP Managed Print Services (MPS) contract that is part of a global MPS agreement between the 3M Group and HP.

IT improvements:

- The number of devices at 3M Australia has been reduced from 130 to 72, simplifying management and reducing operational costs.
- Globally, 3M has reduced energy consumption by over 75 percent.

Business benefits:

- Automating document processes saves 3M Australia AUD$170,000 a year and improves workflow.
- Globally, 3M Group estimated an MPS saving of more than US$3 million in the first two years of its MPS contract.
- It also achieved a page cost reduction of 90 percent.

Conclusion

An effective, sustainable design of your new imaging and printing infrastructure must balance all the elements of utilization, functionality, user profiles, security, environmental sustainability, workflows and total cost of ownership. HP is uniquely qualified to assess your needs and propose approaches relevant to your organization. Utilizing your imaging and printing assets fully provides cost savings, improved productivity and competitive advantage—both today and over time.

For more information

To read more about HP Managed Print Services, go to **www.hp.com/services/managedprint** or **www.hp.com/large/ipg**.

Next steps

Contact your local HP representative to:

- Set up a discussion or workshop to assess your specific business needs
- Establish a plan to implement the best solution for today and into the future
- Identify the environmental approach that can help your organization save resources and money

To learn more, visit www.hp.com/services/managedprint.

1 "3M: HP Managed Print Services saves more than $3M at 3M" February 2009 http://www.hp.com/large/ipg/mfp-build/_assets/3m_pdf.pdf

2 "Disney's corporate commitment to the environment establishes foundation for HP Managed Print Services," April 2010 http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA1-1986ENW.pdf

HP three-part approach

HP works with you to assess, deploy and manage an imaging and printing environment tailored to meet your business needs, while helping you reduce costs, conserve resources and simplify document-intensive processes.

Optimize infrastructure	Manage environment	Improve workflow
HP can help you achieve a balance between your total cost of printing and your needs for user convenience and productivity.	Working together, HP can help you maintain your optimized infrastructure while improving business efficiency and tightening security.	By streamlining your document-intensive processes, HP can help you deliver a more efficient environment for capturing, managing and sharing information.

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