HP is transforming the way enterprises view print management—beginning with its own.
For the past decade, enterprises have been focusing on making IT costs and IT infrastructures transparent and controllable through the consolidation of their server, networking and computing environments. In today’s fast-paced, budget-conscious business world consolidation is king.

Yet for the most part, the print environment has been ignored—despite the fact that print spend can equal a staggering one to five percent of an enterprise’s annual revenue. Many modern enterprises continue to inadvertently support the autonomous use of print devices, resources and processes. This self-governing approach to print has led to the rapid proliferation of print-related hardware and enormous hidden costs.

Case in point: HP’s own print environment. As one of the world’s largest companies—and one of the world’s largest commercial users of printed materials—HP identified an opportunity to take a hard look at its own approach to print management. In doing so, HP discovered ways to dramatically reduce print costs and defined new printing methodologies and processes that will benefit customers as HP helps them progress toward more consolidated, cost-effective printing environments.

The scale of your enterprise may differ dramatically from HP’s, but the principles remain the same. Enterprises must evaluate the management of their print environments to gain control of their print spend. For long term success in this area, print must be viewed as a system – a system that can be standardized and optimized.

The journey to print transformation

Assessing the existing print environment

HP began its quest for print transformation by conducting an assessment of all internal and external HP print needs and expenditures. From printers and supplies to commercial materials and marketing collateral to support and vendor costs—everything print-related was evaluated.

The assessment revealed that HP was spending approximately four percent of its annual revenue on print. Several factors were identified as contributing to this number:

- Multiple print architectures
- Incompatible print hardware
- Low user to device ratios
- Non-systematic approach to tracking purchases and services
- Need for more managed print processes

Multiple print architectures

HP became a global company long before consolidation became a best business practice. Over the years, localized IT decision making resulted in multiple print architectures throughout HP that proved extremely challenging to manage. There was at least one major print disruption per week that interrupted critical business process and resulted in unacceptable revenue losses. These disruptions often involved worldwide and regional teams isolating and resolving print problems, which severely taxed IT resources.

Incompatible print hardware

Incompatible print hardware and outdated devices are just one of many types of fallout that can result from an enterprise’s mergers and acquisitions. Consider HP’s various acquisitions, and most notably, its merger with Compaq. In each case, HP inherited vast amounts of hardware. This proliferation throughout the company of incompatible hardware and outdated, inefficient devices made it difficult to unify and implement print-related processes.
Printer sprawl
In an average enterprise, anything less than a 10:1 user to device ratio indicates the need to consider consolidating. In HP’s case, unmanaged processes between and within departments for purchasing new print hardware resulted in low user to device ratios—in some instances as low as 2:1. Ratios this low created what can best be described as “printer sprawl,” and HP found it to be negatively impacting its print environment on several fronts:

- Additional networking and support requirements that tax IT resources
- The waste of valuable office real-estate and storage space
- The overall complexity that results from managing so much hardware
- Additional costs associated with redundancy of equipment (e.g., extra supplies, support and media)

Non-systematic approach to tracking purchases & services
HP found that a non-systematic approach to tracking or standardizing print-related purchases and services (e.g., purchasing hardware and consumables and managing printer fleets) accounted for a great deal of hidden cost. Many of these costs had been overlooked due to the fragmented nature of print-related expenditures. For example, funding for the purchase of consumables at HP came from a variety of sources, with no single organization providing oversight and control.

Need for unified print processes
Lack of end-to-end print processes is probably the most prevalent, yet unexplored print problem existing in the modern enterprise. These processes include activities revolving around the document lifecycle: production, distribution, storage, retrieval, repurposing and obsolescence. Several major themes emerged from the exploration of HP print processes:

- A majority of print production was being outsourced to third parties
- Content management practices varied widely between business groups within HP
- There were opportunities for greater efficiency and cost savings in this area, but resources were not assigned to drive compliance or effect change

The assessment findings uncovered by HP helped validate the importance of the transformation and provided the hard numbers needed to gain company-wide support. To ensure that these numbers didn’t reflect any internal bias, HP engaged an outside consulting firm to validate the assessment findings prior to sharing them company-wide. This independent study confirmed the cost of printing inside HP.

Countering resistance
As with any change that involves people and processes, there was some initial resistance to HP’s print transformation project. Challenges overcoming this resistance included:

- Garnering executive sponsorship
- Ensuring buy-in and collaboration between departments/offices
- Implementing specific change strategies to address resistance and create approval and support
- Communicating the transformation’s value and benefits to end users
- Developing policies, training and accountability to drive and maintain transformation

The findings of the HP print assessment provided the initial transformation team with the ammunition they needed to quickly earn executive sponsorship. A steering committee assembled by enlisting representatives from HP’s IT, Procurement, Services and Facilities departments. Recruiting members for the steering committee and providing them with a business case to bring back to their peers required that the initial HP team demonstrate how the project could uniquely benefit each group. Once again, the findings from the assessment proved invaluable by uncovering the following sets of benefits:

Benefits to IT
More efficient, cost effective support system, which results in higher end-user satisfaction and productivity. Server consolidation and standardized devices and processes means less time and money spent on infrastructure maintenance and support.

Benefits to Procurement
Consolidation of purchasing processes (both hardware and supplies), which results in fewer purchases, better volume pricing, fewer suppliers to manage and improved inventory management.

Benefits to Services
Streamlined processes and new technologies, which result in cost reductions and resource efficiencies. Fewer printer models/technology to maintain.

Benefits to Facilities
Better use of square footage, wiring, security and power. Simplification of the overall environment they are responsible for managing.
Initiative components
HP’s assessment identified three primary areas of significant opportunity, which were then translated into the following initiatives: consolidation of the print-server environment, consolidation of general office printing resources and processes, and streamlining of the document lifecycle.

“Consolidation reduces the workload for system administrators by reducing the complexity of the environment they manage.”

Consolidation of print-server environment
For the most part, print-server consolidation involves the same processes as any type of data center consolidation: standardizing infrastructures, establishing naming conventions and increasing networking capabilities. The challenge is getting stakeholders to recognize the importance of consolidation and the inability to effectively achieve it without universal buy-in and support. Unlike other business processes, print is not often seen as mission-critical—until it is disrupted.

Print-server consolidation provides the momentum for any successful print implementation. While it may require some upfront investment, the return on that investment is enormous. In addition to providing the framework for a broader print management program, consolidation reduces the workload for system administrators by reducing the complexity of the environment they manage. There is less hardware and software to be maintained, training is easier, and system uptimes rise. Future technology investments see greater returns because they can be shared more broadly across users. And these users reap the benefits of additional features and increased reliability.

General office printing
General office printing includes the day-to-day printing activities that occur in a typical office setting. Costs involved are related to print hardware, software, supplies and services. A primary challenge in this area for many enterprises is a lack of centralized control or tracking of printing assets and costs.

The benefits to be gained with a general office printing initiative are easy to recognize and to imagine implementing. Consolidation reduces the number of print devices that must be managed, which in turn reduces the amount of software, supplies and support that must be managed—and it ultimately reduces the complexity of the overall print environment. Of all the print transformation initiatives, general office printing offers the most immediate gratification by providing quick and obvious results and fast returns on investments.

Document lifecycle
The document lifecycle involves the flow and handling of documents and print collateral—from the placing of an order to its creation, production and shipping to its storage and eventual obsolescence. End-to-end security is also a challenge that must be addressed throughout a document’s lifecycle.

The bulk of documents created by enterprises can be placed into two primary categories—each with its own unique costs and challenges.

Commercial communications
Commercial communication includes the creation and distribution of product packaging and in-box materials. The costs involved in commercial printing are often split between creative development and production. The primary challenge in this area for most businesses is the fact that print is not considered a core strategic component of the finished product; therefore, the associated costs are often overlooked.

Marketing communication
Marketing communication includes the creation and distribution of advertising (posters, brochures, billboards), collateral (white papers, data sheets), direct mail, and point of sale. Costs involved are related to the outsourcing of creative, production, fulfillment, storage and obsolescence. Challenges related to outsourcing include:

- Reusing and leveraging creative content managed by agencies
- Visibility of mandates regulating the use of approved printers or approved printing processes

Because the processes involved in the document lifecycle tend to be highly compartmentalized, many fail to see this area as a crucial component of print management. In addition, transforming processes also involves addressing and changing organizational behavior, which is far more challenging than implementing IT changes. Despite the challenges, this initiative serves as a major opportunity that is vital to the long-term success of any managed print environment. The ongoing nature of this initiative requires that it be flexible enough to adapt to both internal and external changes in the business environment.
Initiative launch and initial results

Print-server consolidation
HP recognized print-server consolidation as a vital component of the transformation and launched this initiative in the earliest stages of the project. The success of the print-server consolidation initiative allowed the steering committee to view print as a manageable system and provided momentum for the broader print transformation project.

General office printing
Recognizing that transforming print processes across HP would require a long-term commitment, the steering committee next focused on the initiative that could offer the quickest return on investment (ROI): general office printing. After assessing numerous domestic and international HP locations, the steering committee chose to launch the initiative in a handful of global locations to ensure that a consistent solution could be developed to address HP’s entire general office printing requirements.

The steps involved in the comprehensive consolidation and management of print that HP is undertaking is expected to take approximately three years to complete. The initial outlook, however, is more than promising and HP has seen nearly immediate results by way of cost reductions. The following table contains both realized and projected results from one domestic location.

Pre- and post-transformation numbers for worldwide print-server consolidation

<table>
<thead>
<tr>
<th>Category</th>
<th>Before</th>
<th>After</th>
<th>Net impact</th>
<th>Percent impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of print architectures worldwide</td>
<td>9 disparate systems</td>
<td>1 worldwide architecture based on HP Output Server (HPOS)</td>
<td>Reduced print escalations, network traffic &amp; network latency</td>
<td>down 89%</td>
</tr>
<tr>
<td>Number of print servers worldwide</td>
<td>525</td>
<td>325</td>
<td>Reduced # of people needed to manage print servers &amp; environment</td>
<td>down 38%</td>
</tr>
<tr>
<td>Number of major print disruptions worldwide</td>
<td>1 per week</td>
<td>Zero in past year (since new architecture was deployed)</td>
<td>Reduced interruptions to critical business processes</td>
<td>down 100%</td>
</tr>
</tbody>
</table>

Pre- and post-transformation numbers for pilot general office printing

<table>
<thead>
<tr>
<th>Category</th>
<th>Before</th>
<th>After</th>
<th>Net impact</th>
<th>Percent impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of devices</td>
<td>4,385</td>
<td>2,004</td>
<td>2,381 fewer devices</td>
<td>down 54%</td>
</tr>
<tr>
<td>Number of manufacturers</td>
<td>12</td>
<td>1</td>
<td>Reduced # of vendors to manage</td>
<td>down 92%</td>
</tr>
<tr>
<td>Pages per device (monthly)</td>
<td>4,625</td>
<td>9,008</td>
<td>4,383 more pages produces</td>
<td>up 95%</td>
</tr>
<tr>
<td>Total annual costs (in millions)</td>
<td>$15.2 M</td>
<td>$8.3 M</td>
<td>$6.9 M</td>
<td>45% savings</td>
</tr>
</tbody>
</table>
Looking ahead to a fully managed print environment

By starting small and achieving quick results, HP has already accomplished the first and most necessary result in any transformation: gaining the enterprise-wide support needed to address the scale and scope of a transformation that spans the entire HP enterprise. These first steps are also crucial in establishing the print infrastructure and organizational behaviors necessary to implement and support HP's ambitious document lifecycle initiative.

Broad executive-level buy-in has been essential in developing, implementing and enforcing the policies needed to establish and sustain a print transformation. These policies have included assigning the roles and responsibilities of the primary stakeholders (IT, Procurement, Facilities, Services).

In the case of enterprise-wide print transformation, HP understands that partial support equates to partial results. Earning the complete support of end users is arguably the most critical aspect of any project of this scope and requires a strong vision and fully developed change management strategies. These strategies should focus on:

- Building consensus among end users on the specific changes that best meet their needs
- Identifying and encouraging attitudes and behaviors that support the transformation and overcome resistance to change

Is your enterprise ready?

Times of change—expanding or downsizing, relocating or being acquired, or simply upgrading or refining business strategy—are excellent opportunities to start talking with HP about print transformation.

Looking to simply reduce print costs? HP can help with that too.

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