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Printer and Copier Fleets: The Gold Mine in the Hallway

Many enterprises are finding one of the most-promising savings opportunities right in their own offices. By actively managing their printer, copier and fax fleets, they can reduce their operating costs and boost profits.

Core Topic
Hardware and Systems: Digital Document and Imaging

Key Issue
How is product multifunctionality affecting the markets?

Strategic Planning Assumptions
By YE05, 60 percent of all enterprises will have begun an enterprisewide effort to optimize document output fleet spending through changes to their purchasing and asset management policies (0.8 probability).

By YE05, there will be 10 percent fewer document output devices (copier, printer, MFPs, fax machines) installed in companies in developed markets (0.8 probability).

By YE05, 60 percent of enterprises will have begun to procure and manage their print, copy and fax devices in a unified fashion (0.8 probability).

Through YE08, enterprises will spend between 1 percent and 3 percent of their revenue on document output (0.8 probability).

Through YE08, enterprises that actively manage their document output fleets will be able to save between 10 percent and 30 percent of their recurrent spending (0.8 probability).

Tactical Guidelines
To manage a large, diverse, output fleet effectively:

- Reduce the number of output devices, while matching the capabilities of the fleet to the organization's needs
- Consolidate printers, fax machines and copiers into a single device
- Negotiate for competitive prices
- Understand how much printing, copying or faxing is being done in your organization

Problem? What Problem?

Until recently, few enterprises saw the need to actively manage their large output fleets. Most lack the most-basic information about their fleets:

- Well-managed organizations that can account for all of their PCs and laptops often have only a rough count of the number of printers they own.
- Few know exactly what devices they have, where they are deployed or how much they spent to purchase them.
- Still fewer know how much they spend on their printers after they are purchased, even though operating costs (such as supplies, service and support) soon surpass the purchase cost.
- Very few enterprises can document the benefit of the printers they own with such basic metrics as how many users each printer serves or how many pages it prints in a month.

Technical Support Nightmare

In contrast to closely managed copiers and data center printers, workgroup printers have no point of overall responsibility. Such control that exists is splintered: Operating groups often pay for printers and supplies, while the IS organization approves the choice of models, installs them on the network and obtains service from the vendor. Corporate purchasing may prenegotiate prices of equipment or supplies when buying hundreds or thousands of printers. Usually, the IS organization or purchasing department assigns this responsibility to a project manager, whose responsibility ends once the equipment is deployed. In the absence of a central point of contact, lower levels of the organization are left to decide when to retire, replace or redeploy equipment. They usually make fragmented, case-by-case decisions. The result is a confusing mix of different makes and models of printers, and a technical support nightmare.

Why Change Now?

Although this pattern is entrenched in enterprises, it is finally changing. Why? Today's worldwide economic recession is forcing enterprises to cut costs to remain profitable or within budget. As the slump enters its third year, they have exhausted many of the familiar strategies of downsizing the workforce and reining in discretionary spending; and, for the first time, CFOs, CIOs and senior IS managers have shown real interest in saving money on their printers and other document output devices. Gartner clients in all major business regions, including North and South America, Europe and the Asia/Pacific region have expressed strong interest in reducing output costs. Technology changes are also forcing enterprises to manage their fleets in a more-unified fashion, with copier and printer fleets merging into one. Enterprises can no longer resist the opportunity to save up to 0.9 percent of their overall revenue (see Table 1). The table shows the amount of money enterprises are spending on output, as well as the opportunity for savings.

Table 1

The Gold Mine of Savings

Company Size — Annual Revenue ($ in Millions)	Annual Print Spending ($ in Millions)	Savings Opportunity — From 10% to 30% Annually ($ in Millions)
$500	$5 to $15	$0.5 to $4.5
$2,000	$20 to $60	$2 to $18
$5,000	$50 to $150	$5 to $45
$10,000	$100 to $300	$10 to $90
$20,000	$200 to $600	$20 to $180
$50,000	$500 to $1,500	$50 to $450

Source: Gartner Research (August 2003)

Strategies for Savings

We summarize four main strategies that enterprises can pursue separately or in parallel to spend less on their document output fleets and get more in return, through gaining and retaining control of their output fleets.

Strategy 1: Rightsizing

Enterprises should reduce the number of output devices, while matching the capabilities of the fleet to the needs of each organization. Most clients that contact Gartner for advice on their workgroup printers report bloated, aging fleets, with printer-to-user ratios between 1-to-2 and 1-to-7. Although there is no magic ratio (see "Printing Myths: The Magic User-to-Printer Ratio"), smaller fleets mean fewer devices to purchase, track, keep in service, house and fuel with electrical power, and keep loaded with paper and supplies.

Even if they still work, aging printers tend to print more slowly the increasingly complex mix of documents. Aging printers also tend to fail more frequently. Older cartridges were designed for shorter replacement intervals, which drives up the cost of the supplies and increases the maintenance load relative to new printers. One of today's 40+ ppm printers can replace several older, lower-speed printers.

The excessive numbers of printers is compounded by the large number of different makes and models, sometimes running into the hundreds, each with its own drivers, service contract and supplies. Simply standardizing on the latest equipment can reduce costs (see "Is It Time to Buy New Printers?"). To prevent printer proliferation, enterprises should develop a standard list of products and configurations and hold buyers to it.

Many enterprises report large and increasing numbers of personal printers on workers' desks. Although inexpensive to purchase, these have double or triple the supply costs of workgroup printers, and usually duplicate the resources already on the networks (see "Public Enemy No. 1: Desktop Printers").

If the copier fleet is more than five years old, the number of copiers may also be trimmed because more and more documents are being distributed electronically, rather than on paper.

Strategy 2: Deploy Multifunction Products

Another way to reduce the size of the output fleet is to consolidate printers, fax machines and copiers into a single device. The important thing to remember about this strategy is not to overdo it:

- Some single-function copiers will remain because some workers, such as clerks and administrators, do too much copying to share the device as a printer. Each site must find the right balance of printers vs. copiers.

- Some single-function printers will remain because people tend to print more frequently than they copy, and they need printers at closer reach.
- Where practical, page volume should be moved from workgroup printers to higher-volume multifunction products (MFPs), which tend to have lower operating costs.
- The page volume will shift more quickly if users are properly trained to use the MFPs as printers.

Because MFPs serve four different functions (copy, print, fax and scan), buyers should draw broadly on the enterprise's expertise in each area (see Note 1). The copier and fax experts from facilities, administration or purchasing should join the IS organization in a single decision-making group. The group should balance the printing, copying and fax functions in its decision making, rather than leaning too heavily on one function (see "The Top 10 Requirements for a Function-Independent MFP" and "The 2003 MFP Magic Quadrant: Multifunction Is the Future").

Note 1
Testing MFP Technologies
MFPs have come a long way since the late 1990s, but they do not always perform all functions as advertised. Therefore, enterprises should test all functions of an MFP before purchasing it. The focus should be on network printing, scanning and faxing, and ensuring that those functions work properly within the context of the enterprise's network infrastructure.

The scan function deserves special consideration because it allows changes in workflow that deliver business benefits that go beyond output fleet management. This is sometimes the main reason for deploying MFPs. For the most part, workflow engineering is done as a separate step. In either case, the built-in and optional scanning functions should inform the choice of MFP (see "MFPs and Imaging: Is Scan-to-E-Mail the Next 'Killer App'?").

Strategy 3: Purchase Competitively

Buyers should take advantage of the "cutthroat" market for printer and copier hardware to bargain for a competitive price. Requests for proposal should clearly state the buyer's needs for hardware, supplies, software and services, but only as narrowly as necessary to meet the buyer's needs. Ideally, buyers should narrow the group to a handful of competitors to get the lowest cost.

By negotiating their copier, printer and MFP purchases (equipment, supplies and service) in a unified contract, enterprises can increase their clout and force vendors or dealers to compete aggressively for their business, not only on the equipment but also on the supplies and service costs. Most enterprises purchase their printers separately from the service and supplies, and fragment their purchases across different divisions or sites. To centralize their purchases, growing numbers of enterprises have outsourced the entire workgroup fleet to a vendor or dealer on a fixed-cost per-page basis. Not only can this reduce the costs 20 percent or more, but it also shifts much of the responsibility for managing the document output fleet to the outsourcing vendor (see "Managing Print Costs With Usage-Based Solutions" and "Printer Acquisition Strategies: Buy Pages, Not Printers").

Considering the difficulty that enterprises face in managing their fleets, outsourcing alone is a big help. Copier buyers have used this approach successfully for some time. Before committing to the monthly minimum number of pages and the overage charges that outsourcing contracts entail, buyers should first take good, reliable measurements of their printer, copier and fax usage. They should then calculate a reasonable prediction of future usage.

Rather than replace their entire output fleet at once, enterprises should replace a percentage of the fleet each year. (Cost-per-page plans often allow for a certain percentage of an output fleet to be upgraded each year.) Lease expirations on the copier fleet may also dictate a staged approach. Enterprises should insist that "upgrade on request" clauses be incorporated into cost-per-page plans, even if there is a charge associated with the upgrade. For enterprises that continue to buy output devices on a purchase basis, annual budgets need to incorporate the necessary funds to replace 10 percent to 20 percent of the total fleet each year.

Strategy 4: The Master Strategy — Gaining and Maintaining Control of the Fleet

The success of the rightsizing and procurement strategies rests on understanding the fleet — that is, how much printing, copying or faxing is being done enterprisewide. The project manager or team (if such exists) must determine if cuts are too deep or not deep enough, and if the remaining equipment is optimally deployed to meet users' needs. Determining rightsizing requires undertaking a research project on a scale for which many enterprises lack the staffing, expertise or inclination to carry out. Those that cannot manage this on their own should consider getting help from vendors that perform such assessments.

Vendors have stepped into the breach with office document assessment services. Such services quickly gather usage information for the customer. Not all vendors are equal in this respect (see "Output Assessment Tools May Lower Output Costs 40 Percent"). Enterprises should also begin, at a minimum, to track how many pages are being printed, copied, faxed and scanned per device. Collecting these statistics can be automated with printer or MFP management and distributed output management software.

Gaining and maintaining control of the output fleet demands not only a strategy but also a team to implement it. Because most organizations have no permanent team for output, the initial planning and research can be done by a task force with representatives from the IS organization, facilities and corporate purchasing. To maintain control over time, some permanent responsibility must also be assigned. Often, this involves consolidating the responsibility for the different output functions — such as printing, copying, fax and scanning — "under one umbrella," with unified budgetary responsibility. The group may reside in the IS organization, or in another part of the enterprise, as is the case at Microsoft (see "Xerox Manages Microsoft's Output Fleet").

Bottom Line: Most enterprises can trim their document output fleet spending by 10 percent to 30 percent while increasing the level of service they provide to users. However, they must pay closer attention to their multifunction products and printer fleets, first gathering information about the current state and determining the needs of each organization. Then they can employ a number of strategies to match the characteristics of the fleet to the needs of the organizations. Enterprises that do so can expect large and recurrent savings.