

## *CFO/CTO guide to Changes in the Printer Industry*

*What is happening, why it's important and how to take advantage of the changes to reduce costs*

Here's some of what you will find inside:

Savvy buyers are taking advantage of the unusually low prices by leasing equipment without OEM service and supply contracts, then using new types of compatible toner to reduce operating costs further by 25%-35%

Digital document management will produce tremendous savings from workflow efficiencies, but it will not decrease printing costs. On the contrary, printing will increase by at least 30%.

Copying and faxing are obsolete, replaced by email and a new category of equipment, Multi-Functional Peripherals (MFPs), which feature "scan-to-network" and "scan-to-email" technology.

New remote monitoring technology, used by outsourced printer support vendors, allows for on-site response times within hours, rather than days, shifting the burden of "first response" from IT to the outsourced vendor.

New best practices are being promoted by printer manufacturers for reducing IT support costs. But most organizations with a mix of printer brands and models can achieve the same results and reduce costs without buying new equipment.

Printer sales professionals depend on the fact that buyers do not know the key information needed to negotiate printer deals such as page counts, page density and cost per page. Certain vendors will do free print audits and free software is also available to help organizations make more responsible decisions.

Color printing is increasing at a rate of 30% per year, but most organizations do not understand the complexities of purchasing and managing color printers.

IT departments are now deeply involved in business process strategy as all forms of document output converge onto the network. The issues of printer fleet management, digital document management, security, data mining, disaster recovery, and data storage are all now interrelated.

### THE FACTS

- Printing/Document production represents a "hidden cost center" equal to 1%-3% of revenue (*Gartner*)
- 75% of all print output is wasted (*PC Magazine*)
- By examining document production organizations can reduce related reducing hardware, IT staff time, and supply & service costs by 8%-41% (*IDC*)
- 55% of all network traffic is "printer related". (*Information Week*)
- The average printers, copiers, scanners, faxes operate well below 5% of their capacity. (*Gartner Dataquest*)
- 50% of all printer fleets are 5 years old or more (*Information Week*)
- The fully burdened cost of document output is 50 cents per page (*Industry Analysts Inc.*)
- 15%-50% help desk calls printer related (*IDC*)
- Manufacturers claim that the ideal ratio of printers to users is 1 printer to every 8.5 users. The current average ratio is 1:3.

## SUMMARY

Printing is out of control. After years of uncoordinated purchasing of printers that was justified by evolving workflow processes, organizations are discovering that there is a “hidden cost center” in printing. Office culture and document production patterns are ever changing. Getting a clear view of workflow processes and its costs is sometimes difficult. The true costs are hidden in leases, office supply invoices, service contracts and separate departmental budgets, but the opportunity to cut costs is significant.

Printing/document management represents an estimated cost of to 1%-3% of a company's revenue (*Gartner*). This means that on the low side a \$10 million per year organization is spending \$100,000 annually on printing and document management, this seems hard to believe. But if you start to consider the fully burdened costs of equipment, paper, toner, repairs, lost productivity, accounting staff time, networks, service contracts, storage, etc. perhaps it is not so far-fetched.

Meanwhile, everything related to document management has converged onto the network: copying, scanning, faxing, workgroup printing, and digital document management. IT now plays a fundamental role in developing business processes. Unfortunately for many organizations there is still no strategy, no analysis and no one responsible. The decisions are still fragmented between departments and multiple vendors from several industries.

By simply focusing on printing and document management, most organizations can dramatically improve the workflow process, taking days and weeks off critical business functions, and reducing infrastructure costs by 8%-41% (*IDC*).

We are sometimes confused ourselves about where the industry is going and what we ourselves should be doing. Here is what's changing in the industry and how we think that you can take advantage of these changes.

## CONCLUSIONS

*Recognize that your organization is now dealing with “print” and “scan” processes, not “copy” and “fax”, that document output is a significant cost center where the direct and indirect costs are often hidden or unnoticed.*

*Digital document management will demand a substantially larger network and increase your organization's printed output by 30%. The savings must therefore come from workflow processes themselves.*

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## GENERAL INCREASE IN PRINTING

1.1 Printing is steadily increasing; the much touted “paperless office” just never materialized. According to AIIM, the widespread adoption of email alone has increased printing by 40% and paper consumption is increasing 6%-8% per year (XPLOR). There is steady growth in printer sales for almost all segments of the market.

1.2 The act of “copying”, on the other hand, is decreasing significantly. A typical office pattern might have formerly been to print a document, then make multiple copies on a copy machine for a meeting. Now documents are emailed to meeting attendees and the individuals print the information on a printer themselves. Thus more printed pages. Likewise, fax machines are almost obsolete for most organizations, replaced by email and new “scan to email” technology.

1.3 Although counter-intuitive, the growth of digital document management will increase printing even more. There is an average of 1.3 prints per scanned page (Industry Analysts Inc.). 40%-50% of organizations intend to further digitize documents for general office needs, human resources, accounting and marketing. (IDC) Digital Document Management technology is becoming more widespread as organizations comply with new regulations and recognize the cost savings accrued from dramatically speeding up internal business processes.

Recognize that your organization is now dealing with “print” and “scan” processes, not “copy” and “fax”, that document output is a significant cost center where the direct and indirect costs are often hidden or unnoticed. If over 1% of revenue is already spent on document production in your organization, and printing is increasing, are the costs contained? Are the workflow processes managed? Who is responsible? Is it the role of Finance or IT or Purchasing?

## NEW SALES AGENDA BY OEMS

2.1 The price of equipment is dropping dramatically. Black & white laser printer costs are approaching the former low costs of copy machines. By next year the cost of color laser printers is expected to be as low as last year’s costs for black & white printers.

So many competitors have entered the printer market, including former copy machine manufacturers, that competition is now fierce.

## CONCLUSIONS

*Conduct a Print Audit to establish a baseline for printed pages and costs. If you are not sure how to start, contact a printer support vendor; they generally do it for no charge.*

*Take advantage of the current low prices for new equipment, but be aware of the shift in sales strategy by OEMs is to lock up toner supply revenue immediately at the point of sale for new equipment.*

*Third party office equipment dealers can sometimes construct competitive deals for new equipment with more flexible financing and ability to “buy out” existing leases, allowing you to trade in older equipment.*

Hewlett-Packard's market share, for example, has dropped from a dominant 81% in 2002 to 55% in 2004, replaced by Lexmark, Xerox, Dell and others (Sostillo & Assoc.).

It is no secret that Original Equipment Manufacturers (OEM) make their profits not from the sale of printers, but from toner and ink supplies. However, just as ink-jet manufacturers have long done, now the laser workgroup manufacturers will be selling machines at near cost, each trying to "buy" increased market share. They are depending on the sale of service and toner supply contracts to make profits. So buying new equipment direct from manufacturers is a great first option to pursue.

Having said that, third party dealers can sometimes still construct better deals for new equipment because of their access to more flexible financing solutions and their ability to "buy out" existing leases.

2.2 At the same time, the quality, yield and reliability of compatible and remanufactured toner is now a viable alternative to more expensive (OEM) brand toner. The toner failure rate for the better compatible and remanufactured toner manufacturers is now equivalent with OEM brands (standard 1% failure rate). The remanufacturing industry has matured and now offers roughly 30% cost savings to consumers. Compatible toner is often the basis for managed print services, which offer free maintenance and support for laser printers.

2.3 How will manufacturers make up for the discounted equipment prices if so much of the market is buying compatible and remanufactured toner?

The shift in sales strategy for OEMs is to lock up toner supply revenues immediately at the point of sale for new equipment. This is accomplished by combining service and supplies into a monthly lease or cost per page program. What is new is not the strategy, but the aggressiveness with which OEMs will pursue these service and supply contracts. They are very high profit centers.

This may not be the best choice, as there are so many other, less expensive sources of toner! Additionally, most OEM service contracts either expect you to take the printer to an authorized service depot or only provide next day service at best. You may find local printer support vendors to be a faster, more responsive solution – for much less. Third party equipment dealers and service providers tend to be much more service oriented and price competitive. They have to be in order to compete with large manufacturers.

## CONCLUSIONS

*High quality compatible & remanufactured toner is now readily available and affords 30% savings in operating costs. This presents a viable alternative to OEM supply contracts. But quality varies among toner vendors so demand up-to-date failure rate reports and references.*

*When renewing copy machine leases or replacing workgroup printers consider an MFP, which provides network printing at copy machine prices and much more functionality including copying, faxing, color and scan to email.*

*The quality of scanning features on MFPs is not always adequate for digital document management.*

*An evolving "best practice" is to standardize on one standard brand of printers in the work environment. It is easier to manage and arguably less expensive.*

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## NEW BEST PRACTICE: ASSET CONSOLIDATION AND MFPS

3.1 A new category of equipment has emerged: Multi-Function Peripherals (MFPs). MFPs now offer copying, high speed printing, color printing, faxing and scanning— all in one machine. These machines are networked and offer printing at high speeds and the low costs formerly associated with copy machines. Many MFPs offer both monochrome and color printing; most offer new features such as scan to email, or scan to network directories. Increasingly new models come with “document capture” functionality enabling firms to better adopt digital document management.

Check out the printers carefully before ordering. Machines tend to do some functions very well but not others, depending on the expertise of the manufacturer. Most MFPs are currently used 40%-50% for printing and approximately 15% for scanning (Sostillo & Assoc). The quality of scanning features may differ significantly and may not be adequate for digital document management, despite the claims by sales people. Both “copying” and “faxing” are features used less and less. We recommend manufacturers with track records in engineering print devices, as opposed to copiers.

3.2 Asset consolidation and asset standardization. As printer manufacturers push for the sale of new MFP machines, the industry is suggesting a ratio goal of 1 printer per every 8.5 users. (currently the average ratio is 1:3 including personal printers) The rationale is that by having fewer machines, at a lower cost to operate, the organization saves money. It is easier for IT to manage with fewer machines. New MFP machines, replacing older workgroup printers, are likely to break down less often and cost less to support.

3.3 Black and white laser printers are almost a commodity now. Every major manufacturer offers a comparable printer with the same features, speed and duty cycle. So it makes sense to complicate life less, by standardizing on the same manufacturer.

However, for organizations concerned with cash flow and limited budgets, this may not be the best approach. New equipment is not always the answer. Most organizations already have enough printers. The average printer prints less than 5% of its capacity (IDC). Over half of printers are already paid for, and they are already under-utilized. The number of pages printed will not increase or decrease, regardless of whether these documents are printed on a new MFP or 3 workgroup printers that are already paid for.

## CONCLUSIONS

*Balance the benefit of standardized assets and consolidating to fewer machines, without falling into a trap of no longer supporting user's legitimate work functions or buying new equipment that you do not truly need.*

*The number of page printed is the same whether you use a few new MFPs or existing workgroup printers, which on average are only printing at 5% of their capacity. Third-party printer management programs, which offer comparable costs per page to new MFP, can often keep your current machines running indefinitely - delaying the need to buy additional equipment.*

Consolidation can also have a backlash. Frustrated users may legitimately complain that they have to walk too far or wait too long for print jobs. The average employee trip away from the desk takes 15 minutes, so organizations need to make sure that they are not sacrificing productivity for a seemingly lower cost per page. At any time users can react by simply purchasing personal desktop printers. The possible cost savings from purchasing new MFPs and reducing workgroup printers is lost if that occurs.

## DRAMATIC GROWTH OF COLOR PRINTING

4.1 Personal color printers, the most expensive of all to operate, are commonplace. Networked color workgroup laser printers and MFPs can generally print in either black & white or color now. By next year, 30% of copiers, laser printers and MFPs will be replaced by color machines (InfoTrends).

As the cost of color printing goes down, color is finding its way into business processes formerly thought to have no need for color. Does accounting need color? Well, sometimes the answer is now "yes". Any communication with a customer is potential marketing collateral. Nowadays this is usually done in color. Hospitals, law firms, government institutions? All now using color.

Most organizations would be shocked to find out how many color pages they already print and how much it is costing them. To keep costs from getting out of control, organizations should investigate where and how color can be used to support their goals. Internal policies to limit unauthorized use should be developed and luckily most color printers now come with built in configurable controls to help accomplish this.

4.2 "Color" is not as simple as "black & white". Engineering design changes, such as tandem drums and new inkjet print heads, have increased print speeds, improved quality and reduced toner costs. The toner itself has changed with the introduction of such things as solid inks and chemical toner.

Many organizations are now producing marketing collateral in-house because of the lower costs and the high quality now available. Be aware that there is a difference in the color printer that one might select simply to print the company logo onto letterhead, and one used by an organization that has moved to in-house printing of

## CONCLUSIONS

*There is a confusing range of options now, so careful consideration should be given to the business use, the paper, the color technology, color image matching and the software applications. Someone in your organization needs to fully understand color.*

personalized marketing materials. Your old logo, which looked just fine on your embossed letterhead or website, may not look so fine printed by the wrong printer or on the wrong paper.

Unfortunately few buyers understand the complexities of selecting the right color technology for their individual needs. Believe it or not, sales people are probably your best source of help. There are no other experts. The technology keeps changing. OEM sales people or third party printer support vendors are the most up-to-date resources.

## PERSONAL DESKTOP PRINTERS

5.1 Personal desktop printers are not going away. On the contrary, over the next few years this is a growth market, especially for personal color printers. The good news is that many inkjet printer manufacturers are moving to new types of print heads, which will provide superior quality and eventually lower costs. They are also increasingly network-able making them easier to manage. The bad news is that inkjet printers, long criticized for the extremely high cost of toner, are increasingly offered for free by computer manufactures such as Dell. These will continue to be very expensive to use.

5.2 Any IT director that has ever tried to banish personal printers from the work environment quickly learns that they pop back up again within three to six months. They are easy to replace through office supply channels and most are easily set up by users themselves without having to consult the IT department.

There are legitimate needs for personal printers, especially when the work is confidential or the user is a very high salaried individual for whom time is precious (or billable). Most laser printer manufacturers now offer several low-cost personal desktop laser printers suited to these needs. The advantage of personal laser printers, as opposed to inkjets, is the ability for such printers to be shared and managed on the network and the relatively low cost of toner.

## CONCLUSIONS

*Rather than ban personal desktop printers, determine who in the organization truly needs them. Does the user need printed documents to be confidential? Is the user a high salaried individual whose time is much better spent at the desk than waiting at the MFP for a print job?*

*If there is a legitimate use, replace the expensive inkjets with more cost effective desktop laser printers that can be managed on the network.*

*Outsourced printer management offers a very sophisticated, easy to use alternative to OEM service and supply contracts, especially when IT is overburdened or has limited resources.*

*Some firms do not require contracts. The better support vendors actually do "manage" the printers and the workflow. The overall costs are lower than OEM programs. It will usually save you 25%-35% of operating costs.*

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## PRINTER MANAGEMENT PROGRAMS

6.1 Organizations that actively manage printer/document fleets will save 10%-30% of recurrent spending (Gartner DataQuest). For many organizations internal IT resources are already understaffed, under-budgeted and faced with ever changing technology. A commonly adopted “best practice” that has evolved in recent years is “total” printer management programs outsourced to third-party specialists. These offer the benefits of reducing costs, while relieving IT staff of the burden of supporting printers. On average 28% of the savings derived from fleet management programs comes from reduced IT support costs alone (IDC).

6.2 Programs generally include toner replacement, preventative maintenance, parts and labor for repairs. On-site response times are within hours, rather than days, shifting the burden of “first response” from IT to the outsourced vendor. Some firms require contracts; some do not. The more flexible programs are billed solely on toner actually consumed or at a cost per page. This allows an organization to pay only for what it actually prints – and no more. Unless new equipment is being purchased there is no need for monthly minimum charges or multi-year contracts.

Printer support firms are well qualified to address the needs of multiple equipment brands. This can make printer management much easier by having only one vendor, who manages all aspects of printer management. Outsourced printer support vendors are not driven by the “equipment sales” agenda often found in OEM firms. The better vendors will also provide on-going analysis and consulting to develop a customized document management plan, often at no charge.

## PRINTER FLEET ANALYSIS

7.1 Print Audits. Most organizations do not know the volume of pages printed or the cost per page to operate their printer fleet; nor do they track who prints how much to each device.

Are equipment purchasing decisions coordinated with administrative supply decisions and/or with IT support staff? Do you have the right equipment for the right users? What are the lease costs? What do the toner supplies actually cost? How much was spent on extended service warranties last year? How much staff time is spent on supporting printers?

## CONCLUSIONS

*Sales people can easily take advantage of unaware buyers because most organizations do not know the volume of pages printed or the cost per page to operate their printer fleet; nor do most track who prints how much to which device or the average amount of page coverage.*

*Do an analysis before doing anything else. New, free software makes it relatively easy to gather most of this information and can also monitor printer status for repairs, page counts for billing and toner levels in the machines to help manage supplies. .*

*Most third-party printer support vendors will also do an analysis for free.*

*Savvy third-party printer support firms now use the new software tools to remotely manage printers allowing them provide faster “first-response” capabilities, which in turn allows IT staff to focus on more important IT issues.*

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## FINAL THOUGHTS

By simply focusing on printing and document management, most organizations can dramatically improve the workflow process, taking days and weeks off critical business functions, and reducing infrastructure costs significantly.

There is a significant "hidden cost" that smart managers are identifying as cost center that can be reduced. But it takes coordination between departments and a willingness to pay attention. Separate, individual decisions, made throughout an organization, add up to tremendous potential for cost savings and better workflow processes.

Someone just needs to step forward and take responsibility. A simple print audit is an easy first step. From there an organization can start to craft a strategy for printing and maybe even for digital document management. Organizations can have the benefits of reducing current operating costs, freeing up IT staff to focus on more important things than printing and translating improved workflow processes into even bigger savings.

## PRINT SMARTER

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Nenita Rozzi  
Marsh Risk & Insurance Services

"The quality of their services is as good as they claimed ... to return to the previous system of purchasing toner and paying for service separately would be throwing away thousands of dollars!"

Peter Stokes  
City & County of San Francisco  
Dept. of Human Resources

"They have been very careful to help us to understand the ramifications that technology decisions have on our longer term business needs. We have been working with Uptime Resources for at least 6 years and continue to be impressed by their technical abilities and amenability. They are a pleasure to work with."

Jim Davis  
Woodruff-Sawyer & Co.