

**STAPLES**

Business Advantage®

# **Driving Business Efficiency and Cost Savings with IT Asset Lifecycle Management**

A Staples, Inc. White Paper

## Optimizing the Lifeblood of Your Business

Businesses today are only as good as their information technology (IT) infrastructure. Ideally, the IT infrastructure will support the business, and even drive the business, while delivering a strong Return on Investment. Managing both sides of this equation is a challenging task, and the key to doing it well is to adopt a methodology known as “IT Asset Lifecycle Management.” By effectively managing the entire lifecycle of IT assets, from evaluation through procurement, ongoing management and disposal, organizations can ensure that their IT infrastructure cost-effectively delivers the capabilities and performance required to support the business.

### Risk Mitigation

Businesses run on IT. So when an IT asset fails, a part of the business fails. Sometimes it can be a relatively low-impact failure, like a print server crashing. But other times, IT asset failure can have a much more profound impact that causes lost revenue, regulatory violations and reputation damage. Adopting IT asset lifecycle management can mitigate these risks through a proactive approach to infrastructure procurement, maintenance and disposal.

### Reduce Costs, Boost Efficiency

A comprehensive IT asset lifecycle management program not only helps to mitigate risks, it can also reduce costs and improve productivity. A proactive approach to IT asset management can eliminate problems before they happen and extend the useful life of assets, which ultimately helps drive business momentum and profitability.

## The Five Stages of IT Asset Lifecycle Management

The major stages of the IT asset lifecycle are:

- Assessment
- Procurement
- Service
- Management
- Retirement

Each stage has its own unique process based on the type of asset under management. This paper outlines key lifecycle management considerations for data center equipment, printer fleets, PCs and laptops, and outsourced software-as-a-service (SaaS) and cloud infrastructure.

## **Data Center Equipment**

The data center is the central nervous system of any business. However, it is also cost-intensive due to its high rates of energy consumption. These costs, along with growing concern for environmental impact, are causing businesses to explore ways to reduce data center energy consumption. This phenomenon has led to the creation of the “green” data center trend where design, equipment and management strategies are optimized to keep power consumption to a minimum. An important step toward the green data center is to implement data center lifecycle management to ensure equipment runs efficiently and cost-effectively. The following sections detail how the five phases of IT asset lifecycle management apply to the data center.

### **Assessment and Procurement**

#### **Assess Software Usage**

Understanding how equipment is being used will ensure that appropriate software licenses are purchased and installed. There may be excess licenses that are not being used, and there may be license exceptions that can further drive down the total cost of licenses. For example, some software vendors provide a disaster-recovery exception where licenses are free when deployed on machines used only for disaster recovery. Similar exceptions may apply for training or testing. The same rigor should be applied to any SaaS subscriptions. It is important to understand whether or not the parameters of each subscription match the usage needs of the organization.

#### **Perform a Data Center Audit**

Keeping old or unused equipment on racks means needlessly spending money on power, cooling and rack space, while also increasing security risks by having a neglected system attached to the network. Periodic audits will identify equipment and servers that are not in use or underutilized, which creates opportunities for consolidation or removal to improve overall data center efficiency.

#### **Perform an Energy Efficiency Audit**

According to the U.S. Environmental Protection Agency, data centers represent between 1.7% and 2.2 percent of total annual U.S. electrical consumption. A data center energy audit can identify opportunities to increase the energy efficiency of the data center, which will reduce costs and carbon footprint.

## **Deployment and Management**

### **Implement Cable Management Systems**

Poor cable management can create a number of problems in the data center. Implementing rigorous, documented cable management processes and systems can decrease the need for troubleshooting, ease installation and maintenance, and even reduce cooling costs.

### **Improve Power Management**

Identifying opportunities to improve power management can reduce overall power consumption in the data center, which is good for both the bottom line and the environment. There are a variety of strategies to consider, including:

- Adjusting temperature and humidity ranges to minimize cooling requirements without adversely affecting equipment
- Improving air flow
- Retrofitting lighting and cooling systems to more energy-efficient systems
- Developing power-off policies and procedures to shut down, hibernate or put to sleep any idle computers
- Identifying opportunities to outsource applications and infrastructure to SaaS and cloud service providers

### **Ensure Proper Rack Configuration**

Having the proper equipment racks in place maximizes the utilization of data center space, enables better cable management and supports more efficient cooling through improved airflow. Documenting rack configuration standards, including weight, power requirements and heat generated, can extend these benefits across the entire data center.

### **Consolidate Network Perimeter Security**

All-in-one network perimeter security solutions, such as unified threat management (UTM), consolidate a variety of functionality including, firewall, antispam, antivirus, etc., in a single box that consumes a smaller footprint than individual devices. This reduces space requirements and environmental impact. Organizations should also consider cloud security offerings, in which security infrastructure is outsourced to a cloud service provider. As with other SaaS offerings, this eliminates the need to purchase and maintain capital equipment in-house, which frees up space, reduces power consumption and relieves IT staff from having to perform mundane administrative tasks so they can focus on more strategic activities.

### **Implement Change Management Strategies and Processes**

Change to systems in the data center is a given. It is important to have a formal change management process in place so these changes do not impact the flow of business.

### **Equipment Retirement**

#### **Communicate Retirement Plans**

When retiring computer equipment, it is important to have a comprehensive communication strategy in place to ensure that the decommissioning process is smooth. The plan should encompass service owners and users, as well as people involved with approvals and chargebacks, depreciation and tax implications, and contract terminations.

#### **Look for Redeployment Opportunities**

Often, servers can be redeployed rather than retired. For example, a server that is no longer suitable to host a mission-critical application may be fine as a secondary mail server. Redeployment can reduce IT expenditures, improve operational efficiency and increase system redundancy of critical services.

#### **Ensure Appropriate Data Wiping**

Even an obsolete system can contain sensitive or confidential information. Erase all data on systems targeted for retirement to avoid introducing security and compliance risk.

#### **Dispose of Equipment Responsibly**

There are a variety of disposal methods, including donation, recycling and destruction. Determine the appropriate approach for each piece of equipment, and check to see if the vendor offers an equipment recovery program for environmentally responsible disposal.

### **Printer Fleet**

Implementing effective printer fleet lifecycle management practices ensures that users have the on-demand printing capabilities that they require, and that printing resources are deployed cost-effectively. A lifecycle management program for printers and multifunction devices can be implemented with the help of an expert partner, such as Tech Solutions. Following are some of the key steps toward implementing effective printer fleet lifecycle management.

## **Assessment and Procurement**

### **Assess Usage**

Assessing usage patterns for each printer provides the information needed to determine the appropriate equipment and services required to meet user needs while controlling costs. For example, desktop printers are often the most expensive component of the printing fleet, so minimizing their use is important for maximizing fleet cost-effectiveness.

### **Understand the Total Cost of Your Printer Fleet**

When calculating the total cost of a printer fleet, it is important to consider equipment purchase and lease and servicing costs, as well the cost of paper, ink, toner and other supplies. Overhead costs should also be included in the calculation. These would include floor space for printers and storage, printer asset amortization or lease, network management and administration (which includes IT staff as well as software and networking hardware), and printing traffic on the network.

## **Deployment and Management**

### **Monitor Service Level Agreements (SLAs)**

Never assume that a service vendor is tracking SLA parameters. Organizations should do their own tracking so they can make sure that the service levels included in the SLA — uptime, average time to problem resolution, breakdown frequency, etc. — meet or exceed the agreed upon SLA. As part of this, it is important to understand downtime costs, which include lost employee productivity, administrators' time to fix printers, and help desk time to field user complaints.

### **Maintain Service Schedules**

Performing routine maintenance on schedule will increase the life of printers and reduce problems that could lead to downtime. Implementing a process for ensuring appropriate maintenance and notifying service technicians when there are issues helps to maximize printer fleet efficiency and availability.

## **Retirement**

### **Control the Rising Costs of Older Printers**

While it might seem as if keeping older printers running is a cost-effective approach, the cost of ink, toner and spare parts increases as printer models age. This, combined with shorter replenishment intervals, can result in high hidden costs. Newer models, on the other hand, can deliver improved speed and durability.

## **PCs and Laptops**

Every computer user has different preferences and work requirements. And today, the range of end-user devices has expanded to include not only PCs and laptops, but also tablets, smartphones and other mobile devices. This diversity of devices and end-user requirements has made lifecycle management a major challenge, and also a major opportunity for cost savings and productivity improvements.

### **Assessment and Procurement**

#### **Maintain an Asset Inventory**

Obviously, you can only manage what you know you have, so the first step to managing end-user computers and devices is to develop a complete asset inventory, including technical specifications, software installed, warranties and maintenance agreements.

#### **Monitor Usage**

Monitoring computer usage will reveal which users are using which applications, and reveal opportunities to eliminate software licenses for applications that are not being used.

#### **Ensure Alignment of Lifecycle and Amortization Schedules**

Finance often amortizes PCs and laptops over time periods that extend far longer than IT keeps those assets in use. IT should work with finance to align amortization schedules with hardware lifecycles so upgrades can occur at the right time and support overall business growth.

### **Deployment and Management**

#### **Deploy Hardware Appropriately**

Matching computer configurations to end-user requirements maximizes productivity and cost-effectiveness. For example, there is no reason to purchase a high-performance computer for someone who primarily uses it for word processing and email. However, providing a notebook computer to mobile workers or “power users” who work from the office and from home ensures that they can be as productive as possible. Understanding workers’ job requirements can help to determine the optimal price/performance computer configuration.

#### **Implement Software Upgrades and Security Patches**

Timely delivery of software upgrades and security patches ensures that users’ systems are running the latest versions of applications for maximum productivity and are fully protected against security threats.

### **Upgrade Hardware Appropriately**

New or upgraded applications do not always require new hardware as well. Often existing hardware can simply be enhanced to support the new application. For example, a new application may only need more memory, rather than a brand new PC.

### **Train Users**

End-user adoption is critical to gaining maximum return on IT investment. Training employees to use new applications or new versions of existing applications can reduce help desk calls and optimize worker productivity. Training employees on security and acceptable-use policies reduces security risks and helps prevent computer problems.

### **Retirement**

#### **Look for Redeployment Opportunities**

Rather than automatically disposing of replaced PCs, look for opportunities to redeploy them with new users who do not have computing requirements as demanding as the previous user. This can reduce costs, improve user productivity, and enable the delivery of upgraded systems to “low-end” users without requiring the purchase of new hardware.

#### **Ensure Appropriate Data Wiping**

As with all computer equipment, data needs to be completely erased from laptops and PCs to avoid introducing security and compliance risk. Mobile devices should be equipped with remote data wiping capabilities in the event they are lost or stolen.

#### **Dispose of Equipment Responsibly**

Many states have electronics recycling laws governing the disposal of PCs and laptops. Some vendors offer equipment recovery programs for environmentally responsible disposal. Or, for a creative way to dispose of used PCs and laptops, companies can offer purchase programs to employees as a benefit.

### **Five Tips to Consider**

- 1. Stay vigilant.** Regular assessments that monitor the impact of new technology, usage of existing assets, and shifting cost structures will provide the information required to maintain IT asset lifecycle management best practices.
- 2. Invest in extended warranties.** While extended warranties or maintenance agreements have their pros and cons, they prevent unexpected expenditures and make budgeting more predictable. IT departments should consider purchasing them when they are buying new equipment.



3. **Train employees.** Teaching employees to use IT assets, including new applications or new versions of existing applications and printers, reduces help desk calls and optimizes worker productivity.
4. **Minimize waste.** Look for opportunities to rationalize and consolidate IT assets. Underutilized servers and printers can be consolidated and unused software licenses eliminated. “Recycle” replaced desktops and PCs by redeploying them to other parts of the organization with lower computing requirements.
5. **Understand true costs.** Knowing how much it costs to purchase and maintain IT assets only provides a partial picture of total costs. Factoring in costs, such as gains or losses in employee productivity, overhead costs and reductions in supply costs, will provide an accurate view of true IT asset costs.

## Staples® Business Advantage: Your IT Asset Lifecycle Management Partner

Staples Business Advantage provides a full range of technology solutions to enable effective IT asset lifecycle management, from managed IT services and data center solutions to everyday desktop technology products and printer fleet maintenance services:

- **Data center equipment** — Staples Business Advantage is the one-stop source for all data center asset management needs.
  - **Products.** We can supply the products needed to manage data center assets, including rack solutions, cable management systems and power management supplies.
  - **Assessments.** We offer digital environmental audits, environmental monitoring and heat extraction, data center relocation, library assessments and more.
  - **Routine Services.** We deliver a range of data center services, such as media labeling and initialization, as well as secure destruction and disposal of data tapes and cartridges.
  - **Emergency Services.** We offer emergency services, including disaster recovery and facility restoration, as well as 24 x 7 emergency supply delivery.
  - **Cleaning.** We even offer data center cleaning services, including subfloor cleaning and sealing.

- **Print fleet** — Staples® Business Advantage delivers much more than toner and supplies; we offer services and solutions to help customers get the most from their print fleets:
  - **Print management.** Our unique combination of print management products, services and software provides a single source for discovery and management, procurement, nationwide maintenance, and fleet analysis and performance capabilities.
  - **Printer maintenance.** Our printer maintenance services offer printer maintenance support, repair, emergency parts and exchange services to keep printer fleets working, regardless of the organization's size or location.
- **PCs and laptops** — Staples Business Advantage provides a broad selection of hardware and desktop technology products to deliver:
  - **Competitive Pricing.** We provide greater purchasing power and vendor consolidation.
  - **More choice.** Our large selection of OEM and quality-tested products provides flexibility and savings.
  - **Immediate access.** We enable customers to instantly place orders, view pricing and availability, and receive most items the next business day.