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Beyond ITAD: Why IT asset refurbishment and reuse is good business

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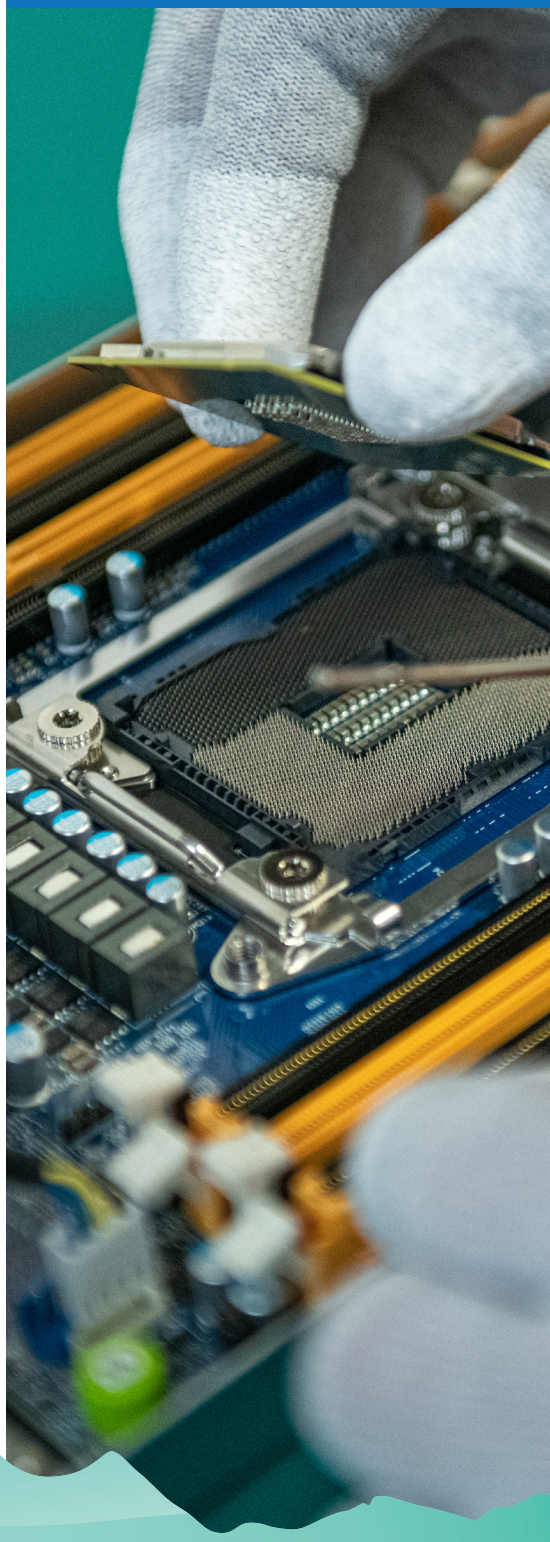

Extending the life of IT equipment through reuse and refurbishment not only contributes to an organization's sustainability initiatives but is also an essential component of an IT cost management strategy. IT asset disposition (ITAD), or the process of safely and responsibly disposing of obsolete or unwanted IT equipment, is evolving to encompass circularity principles that extend equipment life through reuse and refurbishment.

Enterprise IT organizations aren't interested in maintaining fleets of bespoke equipment. Troubleshooting unique hardware and software combinations is costly and time-consuming and risks introducing incompatibilities and conflicts caused by software or configurations unique to a device.

For these reasons, IT groups typically maintain a small number of approved devices they purchase in quantity to maximize discounts. Images, which are snapshots of a computer's software and data that usually include an operating system, applications, and configuration, are stored in a library from which they can be replicated to new or refurbished devices within a few hours. This approach reduces support needs to a finite set of systems, peripherals and software and ensures that new devices run the same software and patches as others in the field.

Hard drives, displays and other components can be easily swapped from an inventory of compatible parts. Retired or broken machines can be disassembled and their parts reused. IT organizations can minimize their inventories of devices and parts and upgrade large numbers of PCs and laptops quickly and consistently using identical parts. Maintenance is dramatically simplified because computers and components can be easily swapped without the risk of software incompatibilities.

Internal Reuse

Most employees don't need state-of-the-art equipment so older devices can be redeployed to less processing-intensive tasks. An executive's high-end laptop can be handed down to an entry-level salesperson or clerical worker to extend its useful life for years. IT organizations can maintain two or three generations of equipment and cycle through them incrementally, retiring end-of-life devices and replacing them with new ones in bulk.

> "Most organizations are increasing refresh cycles to four and five years for employee laptops and three years on mobile devices to capitalize on their useful life. Extending their life span represents millions of dollars in potential cost savings and can defer thousands of tons of greenhouse gas (GHG) emissions from manufacturing new products."
>
> **Gartner®, Best Practices for Device Sustainability in End-User Computing**

While these practices are commonplace in large organizations, they can work for businesses of any size.

Don't trash. Refurb.

Internal refurbishment programs can extend the useful life of equipment by years. Slow-running PCs and laptops aren't necessarily destined for the recycling bin. Several factors can cause performance slowdowns.

- Numerous software updates over time can tax system requirements.
- Hard drives become fragmented and slow down.
- Overheating from dust accumulation in air passages can cause CPUs and other components to throttle performance to stay within safe temperature limits.
- Over time, installation and removal of software clutter the system registry with unnecessary entries and slow performance.
- Undetected malware and viruses can impact performance even if they do no other damage.

Cleaning and reformatting or reimaging a slow PC or laptop can improve performance dramatically. So can adding system RAM or replacing a hard disk with a speedy solid-state drive. Swapping full-featured operating systems for lightweight alternatives such as Linux can breathe new life into older hardware, particularly when the device is repurposed for unattended tasks like file-serving. These relatively inexpensive steps can add two or more years to the life of an aging device. ITAD partners with expertise in refurbishment can provide these services and outline additional options for extending device life.

Buy gently used refurbished equipment

Refurbishment is also a sensible strategy for equipment purchases. Most PC and server makers sell used and reconditioned gear at a substantial discount. Purchasing a refurbished computer extends its lifecycle and reduces electronic waste by keeping equipment in circulation and reducing the environmental impact of manufacturing new devices.

Reputable refurbishers follow rigorous testing and repair procedures, perform thorough inspections and often offer warranties and support options comparable to new equipment. Refurbishment can also give the organization access to older models no longer in production, enabling them to replenish their stockpiles of approved equipment.

New life for old equipment

Computers that are simply too old to be used in the workplace can often be redeployed for less intensive tasks, such as departmental file servers, print servers or network firewalls. If internal reuse options aren't practical, consider donating older equipment to charities and nonprofit organizations. Hard drives should be fully scrubbed using reputable, commercial-grade data sanitization programs before leaving the company. Tax deductions may be available for donated equipment.

Some companies also offer older equipment to employees at a discounted rate for use as home file servers, media servers, backup devices, and DVRs. These low-intensity applications can add years of life to equipment that might otherwise be candidates for scrap.

Circular ITAD

Circularity is an operating model that reduces material use by recapturing the maximum value from existing resources. It's the core principle of sustainable organizations and, as you can see, also a good business practice. Leading ITAD providers look beyond disposal to circular asset lifecycle management practices that wring more life and value out of IT investments.

Gartner, Best Practices for Device Sustainability in End-User Computing, Autumn Stanish, Annette Zimmermann, Katja Rudd, Stuart Downes; 13 March 2024