



Disowning Your IT Assets

Rethinking Cost of Ownership

Businesses with a strategic approach to purchasing and managing technology know the importance of cost-of-ownership planning. The financial impact of hardware, software, training and support goes far beyond the initial purchase price. Computing these “all in” costs is crucial to making IT an enabler for business success.

Now there’s a new piece of “ownership” calculus that directly affects your bottom line and your company’s reputation.

It’s the cost of disowning IT equipment.

Companies cast off millions of tons of old computer equipment every year and the volume is rising nonstop, for even as the devices themselves shrink, their raw number and the pace at which they become obsolete are escalating. Analyst firm IDC estimates that 40 million PCs and laptops were discarded in 2006, and Gartner forecasts that consumers and businesses will replace more than 925 million PCs worldwide by 2010.

“It’s a tsunami,” says John Schwartzenberger, director of corporate IT asset management for McKesson, a Fortune 100 company. “We manage inventory in multiple data centers and more than 25,000 PCs. Five years ago, 70% of our machines were desktops and 30% were laptops. With the recent wave of mobile computing technologies and the desire to provide our workforce home-life flexibility, that has inverted. We now manage 75% mobile devices and 25% desktops. Tracking all those assets when we purchase them is one thing; monitoring them all the way through to the end of the life cycle requires a much more holistic approach than we’ve traditionally needed.”

Cradle-to-grave (and perhaps cradle-to-reincarnation) asset control is uncharted territory for most businesses. Companies

getting rid of once-valuable IT assets are walking a swaying tightrope between operational efficiency (out with the old, in with the new) and ever-stricter compliance obligations. Negative consequences run the gamut from warnings to fines to image-destroying environmental disasters, a growing risk made painfully clear in a recent [“60 Minutes” documentary](#), “Following the Trail of Toxic E-Waste.”

It may look harmless, but your old laptop, cell phone and printer – with their semiconductors, circuit boards, memory modules and disk drives – result from manufacturing processes that involve more than a thousand separate ingredients, including chlorinated solvents, brominated flame retardants, PVC, heavy metals, plastics and gases. Even new-generation LCD screens contain mercury, a highly toxic compound with a long half-life.

That’s a lot of volatile material to keep under the hood, and it doesn’t even begin to address the data vulnerability of discarded digital devices. This actually turns out to be the biggest worry of enterprise IT managers. In our “2009 ITAD Trends Report,” 42% of IT professionals said that concern about data security breaches is their biggest motivator for adopting a formal IT asset disposition program¹. That’s almost twice as many as those who do it because it’s the “green” thing to do.

Whatever the motivation is, without a proactive strategy for managing phased-out IT gear, “previously owned” becomes “currently at risk.”

The cost of ownership now takes on a whole new level of unpredictability.

Disposal Versus Disposition

Disposal is a tactic. Disposition is a strategy. Disposal represents the mind-set of “get rid of it” and is an action that

may or may not accord with good environmental practices. In terms of electronic trash – or e-waste – the U.S. Environmental Protection Agency estimates that in 2005, the U.S. generated 2.63 million tons of e-waste, and only about a tenth of that was collected for recycling. The rest went into landfills and incinerators.

And while it's reasonable to assume that businesses are more disciplined about such matters, only 15% of enterprise IT managers in our survey admitted that they're still tossing old IT equipment into dumpsters. We can only guess how high that number might actually be.

The good news is that virtually all the IT managers surveyed expressed awareness of the e-waste problem. In addition, two-thirds of the respondents indicated that ITAD is now part of their strategic IT planning.

The key word being "strategic." The new mind-set of disposition treats the phase-out process as a vital segment of the IT life cycle, not as a housekeeping chore or random act of eco-friendliness.

"This isn't even about recycling," says Michael Osterman, the research analyst who conducted the ITAD survey for Converge. "It's about the very complex and risky business of managing the tail end of the technology life cycle. That requires incredible logistical coordination but also the ability to ensure chain of custody as machines are demanufactured for reusable parts, turning one asset into potentially dozens, each bearing liability back to the original owner."

McKesson's Schwarzenberger, who represents a very sophisticated enterprise user of ITAD services, agrees and puts it into dollars and commonsense terms.

"It is all about accountability," says Schwarzenberger. "My group is responsible for monitoring and controlling the entire life cycle of technology across all McKesson businesses. Millions of tax dollars are at stake if we don't track depreciated IT assets properly. I report directly to our financial organization and the ITAD provider reports to me. That's how important this is."

Five Keys to Proper Disposition

With a commitment to integrating IT asset disposition into the new holistic model of cost of ownership, the next step is putting the resources and infrastructure into place. Even without a repressed economy, it's debatable whether businesses, even large Fortune 500 companies like McKesson, will grow this capability in-house. With the emergence of specialized global providers, this may remain an outsourced function.

From our own experience and feedback from enterprise customers, I have distilled a set of guidelines for making ITAD part of the best practices of your IT organization.

1. Don't treat it like junk

If it's junk, then it doesn't contain anything worthwhile, right? Wrong. A study of hard disks purchased secondhand by BT Group and universities in



three countries found that 41% of the disks still contained commercially sensitive information. The BBC bought 17 used hard drives in Nigeria for \$25 each and recovered home addresses, bank account numbers, passwords, confidential e-mails and other sensitive data from them.

Even with sophisticated hacking techniques at their disposal, computer crooks still go dumpster diving to pilfer sensitive business data the old-fashioned way.

Let's flip this coin. Not only are your IT assets not garbage in the traditional sense, they may actually harbor revenues - something that gets precious little attention in all dialogue about e-waste disposal. In our experience, a healthy portion of the IT gear heading out the doors of major corporations is still usable in some fashion or may contain functioning components (memory, CPUs, drives), even if the systems themselves are obsolete.

It is not unusual for our enterprise customers to generate meaningful income by remarketing these materials in whole or in part, turning trash into cash - enough to literally pay for their entire ITAD program in some cases.

2. You own it longer than you think

Liability for data protection continues long after an asset is transferred to a third party. If a data security breach occurs, law enforcement officials (and the media) will investigate not only the disposal firm but the company that originally owned the computers.



Contractual overrides rarely insulate data owners from liability and potential environmental issues. Regulators may insist upon keeping detailed tracking records to establish that appropriate data protection procedures were followed during disposal. These records should establish a chain of custody that is linked to a company’s internal asset management systems. In many instances, these audit trails involve specialized reports that are unique to a government or regulatory agency.

3. Drives are almost impossible to erase

Reformatting a hard drive, the most common erasure method used by non-security professionals, simply overwrites indexed tables and, in most cases, leaves actual data accessible to prying eyes.

The closest thing to absolutely clean is the Department of Defense’s 5220.22-M erasure standard, which requires specialized equipment and licenses to implement. Also, erasure tools for hard drives won’t necessarily work with cell phones, PDAs and flash memory sticks.

This is not a DIY project even for large, IT-savvy corporations like McKesson. In addition to the significant resource requirements of enterprise-scale data erasure, you have to keep up with the latest liability issues of data privacy, archiving and all manner of downstream security risks of electronic storage devices leaving your company.

4. Asset disposition is not a commodity service, so choose carefully

Considering the consequences - and the rapidly morphing legal and regulatory landscape, businesses cannot afford to get this wrong.

I hope we’ve established that you should not be seeking a “disposal” vendor at all. You should be engaging a qualified national (even global) IT asset disposition partner. There are relatively few with the resources, training and quality certifications to deliver true end-to-end disposition services. An example of vendor certifications to look for is the G.R.A.D.E. certification issued by IDC, which recognizes best practices in ITAD services, and certifications to ISO 9001, ISO 14001 and OHSAS 18001.

“I’ve talked with literally hundreds of disposal firms in the past few years,” says Schwartzenberger. “There are a lot of fly-by-night operations promising to remove and recycle your old computer hardware. Very, very few have the systems in place, and the experience, to partner with a large corporation and deliver true enterprise-class ITAD services from start to finish.”

5. Insurance is relevant but also relative

A common and potentially dangerous misperception is that a vendor’s insurance insulates your organization

from all risks. Policies vary widely in type and definition of coverage, with some limiting terms so severely – such as a policy that covers only the value of the equipment itself – that they amount to no insurance at all.

Your first step toward full protection is to select an ITAD provider whose reputation, references and resources pass the kind of due diligence you’d impose on your primary systems and network vendors.

During that process, find out if the ITAD provider can provide secure transportation, references from Fortune 500 companies and real-time Web reporting on the status of your materials.

Equally if not more important than insurance is the assurance that your organization derives from documented proof that key steps in the ITAD chain have been accomplished. Chief among these are a Certificate of Destruction and a Certificate of Recycling. One best practice to insist upon is chain of custody. Like handling evidence in a criminal investigation, a top-notch ITAD provider will tag, track and report in real time the exact status of every piece of equipment it’s handling for you. This ensures total transparency in any kind of audit – crucial after Sarbanes-Oxley, HIPAA and other compliance mandates – as well as fly-by-wire control of your assets during the disposition process.

It’s difficult to boil down such an evolving and complex topic into simple remedies. The bottom line to all this is, well, the bottom line. When it comes to technology cost of ownership, the absence of an IT asset disposition strategy is going to cost you sooner or later. When you decide to implement an ITAD program, and especially if you outsource that program, make sure to demand the kind of competencies and service you expect on the purchasing side of the ownership equation. That’ll ensure that the only surprises are good ones – like unexpected revenue – when it’s time to disown those investments.

¹ The 2009 IT Asset Disposition Trends Report was commissioned by Converge. For a complimentary copy please visit www.converge.com/report.

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