

Maximize value and build sustainability into your technology lifecycle with IT asset disposition

Leverage the tenets of circular economy to ensure safe and responsible treatment of aging assets, maximize value recovery, data security, and compliance.



Safe and responsible IT asset disposition not only emerges as a necessity from a sustainability standpoint, but also from the purview of data security and compliance

Executive summary

With shorter IT asset lifecycles and technology paradigm shifts like cloud computing, organizations are in the process of retiring their old assets and investing in new technologies to gain a strategic edge. A systematic approach to IT asset disposition is a key aspect of this process – not only because retired devices may still represent significant value to the organization, but also because of sustainability and data security concerns.

In this whitepaper, we look at four key aspects of IT asset disposition – and how each of them affect an organization from a financial, ESG, security, and regulatory perspective. Safe and responsible IT asset disposition not only emerges as a necessity from a sustainability standpoint, but also from the purview of data security and compliance. Sustainable and safe approaches to ITAD can also be embedded into a strategy that maximizes the value recovery from retired assets.

Finally, we examine the challenges of implementing such an approach from the perspective of global, hybrid organizations, and how ITAD service providers can help mitigate them and lower the cost of the overall IT lifecycle.

Consider **IT done**

Visit zones.com or call **800.408.ZONES** today.

Introduction

IT assets have formed a crucial aspect of business operations for more than five decades now. Over this period, numerous technology disruptions have rendered old technology less and less valuable, compelling businesses to retire old assets and invest in new ones. Today, computing and technology innovations are unleashed at breakneck speeds, and with each wave of innovation, new value propositions are made viable to businesses.

In other words, the IT asset lifecycle is becoming shorter. At the same time, technology is now at the heart of business in nearly every industry. Sometimes, organizations are forced to invest in emerging technologies to achieve a competitive edge, and at other times, due to paradigm shifts. All of these factors point to an obvious question: what happens to old assets when organizations invest in newer technology?

This question is tied to three key issues – i.e., sustainability, value of retired assets, and security and compliance. IT asset disposition (ITAD) is a complex aspect of the IT asset lifecycle, and demands strategic and operational expertise, especially for global, distributed organizations.

From investments in logistics to expertise in reuse, recycling, and reselling, building an ITAD practice can be both expensive and time consuming for businesses. However, considering its necessity and advantages, ITAD presents a lucrative value proposition to enterprises today.

In the following pages, take a look at the reasons why ITAD is at the heart of the enterprise technology lifecycle, its challenges and advantages, and how you can achieve the latter by joining hands with a trusted ITAD partner.

IT Asset Disposition: a crucial aspect of the modern enterprise technology lifecycle

Take a look at some of the core rationales that necessitate responsible and safe ITAD in the modern enterprise IT lifecycle.

ITAD for a sustainable IT lifecycle

As production of IT devices grows at a rapid pace, so is the volume of electronic waste generated annually. In 2019, 15mn units of personal computing devices, 15mn units of enterprise infrastructure components, and 405mn units of industrial printers contributed to 53mn+ metric tonnes of e-waste. Of the overall volume of generated waste, only 17% was recycled.¹ But the more concerning aspect is the rate of growth of e-waste, which is expected to amount to 75mn metric tonnes by 2030.²

Unsustainable disposal of e-waste goes against the principles of sustainability in 3 key aspects:



It leads to loss of finite resources and contributes to a higher waste footprint.



It exposes soil and water to toxic elements like lead, mercury, cadmium, and nickel.



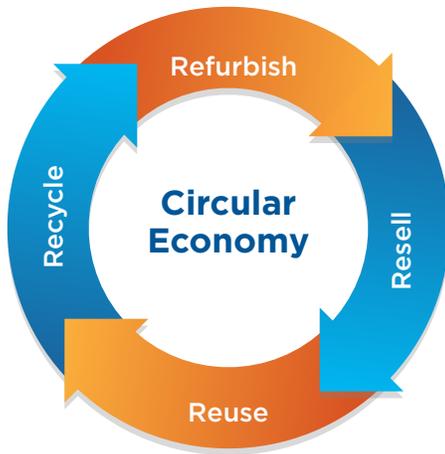
It precludes the generation of value out of retired products.

Consider **IT done**

Visit zones.com or call **800.408.ZONES** today.

Sustainable ITAD with circular economy

IT asset disposition can be made sustainable by leveraging some of the founding principles of circular economy. This is a technique to shift the focus from waste management to waste prevention, and recovering and generating value in the process. It can be accomplished by following disposition of assets with either of the the following viable strategies:



- **Refurbish:**
In this approach, retired devices are restored to their original functionality, thereby extending their remaining useful life.
- **Resell:**
Refurbished, or retired (and still functional) assets are sold to other businesses that are looking for the same product.
- **Reuse:**
Either the product is deployed for a different purpose after an upgrade, or its components are utilized to manufacture a different product.
- **Recycle:**
Here, the asset's raw material (plastics, metals, neodymium magnets, etc.) is extracted, and injected back into the supply chain.

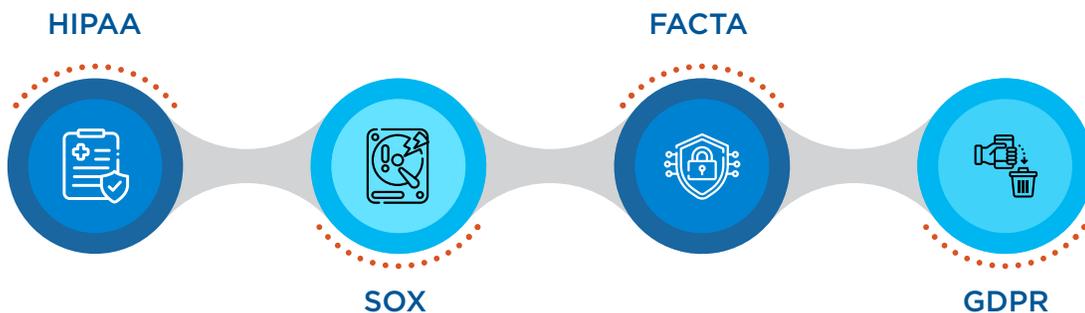
All of the above strategies enable organizations to reduce their waste (and Level-3 emission) footprint, and undertake a sustainable approach to resource usage.

These strategies are crucial to curtail unsustainable asset disposal practices like open air combustion of devices to recover elements, or water and soil pollution via release of toxins into landfills. While e-waste may represent just 2% of the waste in the landfills, it contributes to 70% of the toxins in them.³ For organizations that have already made, or are in the process of making sustainability commitments, ITAD can be a key step to advancing their goals.

ITAD for regulatory compliance

In some geographies IT asset disposal mechanisms also fall under the purview of data security and privacy, and e-waste regulations. These regulations govern aspects like destruction of information, privacy violations, handling of toxic elements, and process / worker-related risks.

When considering an ITAD strategy, businesses should consider the following key regulations that govern data security and privacy violations:



Consider **IT done**

Visit zones.com or call **800.408.ZONES** today.

- **HIPAA:** The Health Insurance Portability and Accountability Act necessitates that devices containing sensitive information are either destroyed, or the data is wiped out before disposal.
- **SOX:** Organizations covered by Sarbanes-Oxley Act must ensure data destruction from retired media via methods like software methods, or processes like degaussing, shredding, melting, pulverization, or incineration to ensure non-recoverability.
- **FACTA:** The Fair and Accurate Credit Transactions Act applies to financial companies, and requires them to effectively dispose of consumer information to protect them from identity theft.
- **GDPR:** Consistent and effective disposal of assets is a key aspect of General Data Protection Regulation compliance. It also implicates companies for 3rd party data processors and ITAD vendors.

It is worth noting that data destruction is not the only aspect that links ITAD to regulatory obligations. Other regulations, some of which are still in evolutionary phases, hold organizations responsible for safe disposal of e-waste. Currently, 78 countries are known to have an e-waste legislation or policy in place – up from 61 in 2014.⁴ Moreover, in countries like the USA, despite the absence of a nation-wide legislation on e-waste, individual states have rolled out their own directives. When retiring IT assets, it is crucial to map regulatory requirements to your areas of operations to ensure complete compliance.

ITAD to ensure data security and privacy

With paradigm shifts in the technology landscape, businesses typically undertake enterprise-wide infrastructure refresh initiatives. This has in fact, been a continuing trend in over the last few years, as businesses mass-migrated their data and applications to the cloud, and decommissioned IT assets that were deployed to support operations via their offices. This also involved decommissioning of data centers, which led to the retirement of tens of thousands of servers, networking equipment, and other assets.

For global organizations, keeping track of IT inventories alone can prove challenging. But when asset disposal initiatives are conducted, maintaining a chain of custody for retiring assets is crucial owing to the data security risks. In fact, the Cyber and Infrastructure Security Agency (CISA) has included ITAD as a key threat vector in the software supply chain. This is not surprising considering the fact that the refurbished devices market saw a strong downward readjustment of demand following the adoption of data destruction methods.⁵



The Cyber and Infrastructure Security Agency (CISA) has included ITAD as a key threat vector in the software supply chain. This is not surprising considering the fact that the refurbished devices market saw a strong downward readjustment of demand following the adoption of data destruction methods.

Consider **IT done**

Visit zones.com or call **800.408.ZONES** today.

Here are some of the key factors that expose assets to data security risks during their retirement and disposal:

- 

Lack of a chain of custody: This makes it impossible to maintain control over which assets are retired, and whether they have undergone key milestones like data wipes.
- 

Ineffective data wipe methods: With some methods, it may be possible to recover wiped data from an erased hard drive, leaving sensitive data exposed for a potential breach.
- 

Compromise during transit: If data wipe is not performed at the site, it may be compromised in transit unless a chain of custody is maintained.
- 

Compromise in disposal facilities: If IT assets are aggregated at a facility before a data wipe is performed, lack of surveillance at the facility can increase the potential for a compromise.
- 

Refurbishing before data wipe: Finally, if an asset is sent for refurbishing to a vendor before performing a wipe, it can be compromised at any stage of the process, or after resale.

Data security risks can also materialize when organizations tie up with ITAD vendors that do not apply effective data destruction practices – and when they do, they can wreak substantial financial and reputational damage to an organization. A recent instance of this was a \$60mn fine imposed by the Office of the Comptroller of the Currency on a major bank, for their vendor’s failure to dispose of disk drives containing customer data. ⁶

Business benefits of responsible IT Asset Disposition

Considering the growing importance of ITAD in the enterprise IT lifecycle, it is also crucial to note the upsides. Here are some of the key benefits of responsible ITAD:

Cost Savings: Recover value from their retired IT assets by reselling or recycling them, and maximize RoI on your investments.



Data Security: Ensure complete and verifiable erasure of data from your assets before retiring them to safeguard your organization from the risk of a breach.

Compliance: Comply with regulatory requirements for harmful waste disposal and data security and confidentiality with safe ITAD.



Environmental Responsibility: Reduce your materials and GHG footprint by recycling, reusing, and refurbishing retired assets.

Consider **IT done**

Visit zones.com or call **800.408.ZONES** today.

How to maximize value recovery with ITAD

Maximizing the value of retired assets requires a calculated and targeted approach, because not all assets will undergo the same treatment.

Here are some of the strategies that can be leveraged to maximize value recovery:

1. Leverage historical data to determine if the asset yields more value when it is resold as it is, or when it is dismantled and sold as parts.
2. Develop proprietary methods to determine a fair-market value based on research of buy-back rates. This can help negotiate the most aggressive value of retired assets when reselling them.
3. Another approach is to work with refurbishment partners, who will perform repairs and upgrades on existing equipment to make them ready for redeployment.
4. Recycling typically yields the lowest recovery of funds, because of dropping costs of raw materials that will be recovered in the process.
5. Logistics is a key cost factor in value recovery. Resale or refurbishment will make sense only when the recovered value of assets exceeds the cost of moving them.
6. Conduct auctions on online marketplaces to sell equipment at the highest prices that the market is willing to pay.

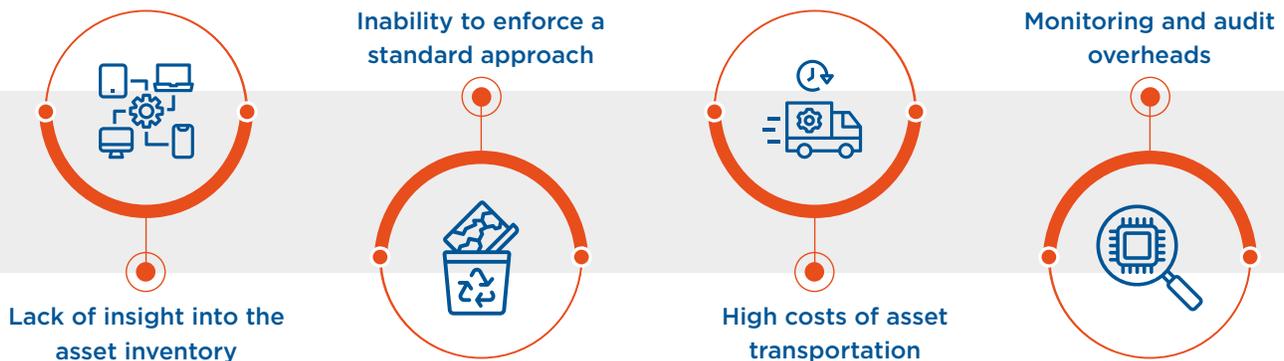
When effective ITAD practices are employed, retired assets will yield non-trivial value which can help lower the cost of technology refresh, or free up funds for transformational initiatives.

Lastly, sustainable ITAD can also help you increase brand equity. By advancing ESG initiatives with green IT asset disposal practices, businesses can make themselves more lucrative from the standpoint of consumers, investors, and employees alike.

ITAD challenges: a 2023 perspective

While safe and responsible ITAD is both necessary and beneficial for businesses, running global ITAD programs can prove an operational perplexity for most businesses. However, it can prove doubly challenging to businesses operating in a hybrid work model, with a presence across the globe.

Here are some of the key challenges faced by organizations that undertake ITAD initiatives:



Consider **IT done**

Visit zones.com or call **800.408.ZONES** today.

1. Lack of insight into the asset inventory

What cannot be observed, cannot be measured. Running an ITAD program at a global scale requires a coordinated effort and cross-team collaboration. Inventorying all the assets to be retired is crucial to prevent theft, data breaches, and deviation from a standard procedure that should be enforced for retiring each asset. However, building an inventory of assets can be time consuming and expensive, which reduces the value recovered through your ITAD program.

2. Inability to enforce a standard approach

In some geographies, business units may not have an ITAD policy in place, and there may be differences in asset retirement policies where they do exist. Enforcing a standard approach may not be possible because each team may work with different vendors, each with their own policies. This lack of standardization creates risk and makes it difficult to recover maximum value from your assets.

3. High costs of asset transportation

One of the biggest challenges in running an ITAD program is the cost of logistics. Whether you are sending your equipment to a reseller, a refurbishment facility, or a recycling company, you will have to bear the cost of transport, packaging, expedition, consolidation, etc. Without an experienced ITAD partner, these costs can further deteriorate the value recovered from the ITAD initiative.

4. Monitoring and audit overheads

Lastly, some regulatory obligations will require organizations to audit and monitor the assets as they are moved between sites. This involves chain of custody documentation like certificate of data destruction, asset transfer forms, etc. These overheads can take significant manpower and mount the cost of ITAD initiatives.

However, these challenges are not insurmountable. In partnership with an experienced and trusted ITAD service provider, organizations can ensure secure disposal of assets with maximum value recovery.

The way ahead: partnering with a trusted ITAD service provider

While it may prove challenging for organizations to lead a secure, safe, and responsible IT asset disposal initiative, ITAD service providers can help you tackle every aspect of it with proven strategies. By leveraging their logistics networks, partner networks that consist of refurbishing, recycling, and reselling businesses, and compliant data destruction processes, organizations can exploit economies of scale and recover sizeable funds while leading a sustainable ITAD initiative.

When selecting an ITAD service provider, it is crucial to pay attention to a few aspects:



**Confirm the scope
of services**



**Ensure that the
partner is certified**



**Verify if they provide
chain of custody**

Consider **IT done**

Visit zones.com or call **800.408.ZONES** today.

1. Confirm the scope of services

Some ITAD providers will offer end-to-end services, which include de-installation, serialization and auditing, priority pickups, packaging, and transportation of the equipment. This enables you to focus on your infrastructure refresh initiative, instead of having to worry about disposal processes.

2. Ensure that the partner is certified

Certifications like R2 and eStewards ensure that your partner, or their services comply with industry standards for e-waste recycling. Similarly, other certifications like NAID AAA ensure that the ITAD provider employs standards that comply with global data destruction laws.

3. Verify if they provide chain of custody

This is crucial to verify that data security of decommissioned assets is ensured before, during, and after they are in transit, at the partner's facilities, and in the following stages.

IT industry leaders like Zones offer end-to-end ITAD services that help you decommission your aged IT assets securely and responsibly, while extracting the maximum value from them. Leveraging top-notch inventory strategies, Zones ITAD services span onsite services, remarketing, and sustainable disposal.

What next?

As IT assets continue to grow amidst rapid technology disruptions, organizations need to re-evaluate their approach towards IT assets, as they have now become a running investment of business operations. As more assets are purchased, used, and decommissioned over the coming years, value recovery from aged assets will be as important as sustainable treatment of hazardous e-waste. Those that lack the requisite expertise in ITAD operations, should exploit the expertise and experience of trusted ITAD service providers like Zones to lead sustainable ITAD initiatives.

Join hands with the leaders in IT asset disposal to start your journey today. Write to [email] today.



Zones has created a robust suite of services across Digital Workplace Services, Cloud and Data Center, Networking, and Security domain, developed under the purview of the Zones Innovation Center. Zones Innovation Center is a multidisciplinary and collaborative technology environment that helps transform business use cases into working prototypes. Leveraging technology experts, OEM alliances, and scalable technology platforms, Zones assists businesses in simplifying and accelerating their digital journeys.

Consider **IT done**

Visit zones.com or call **800.408.ZONES** today.

About Zones, LLC

Zones, LLC is a global IT solution provider that delivers products and services to help companies make a complete digital transformation – from desktop to the data center – to the cloud and beyond. Positioned to be the IT partner you need, Zones specializes in Digital Workplace, Cloud & Data Center, Networking, Security, and services, including Professional, Managed, and IT Staffing. Zones operates in over 100 countries, leverages a robust portfolio, and utilizes the highest certification levels from key partners, including Microsoft, Cisco, Dell Technologies, HP Inc., HPE, Apple, Adobe, Intel, Lenovo, and more. A certified Minority Business Enterprise (MBE) and holder of an elite Corporate Plus Certification, Zones has mastered the science of building digital infrastructures that can change how you do business and have proven its ability to support many of the world's largest corporations. For additional information, visit the company's website at www.zones.com.

Follow Zones, LLC on [Twitter @Zones](#), and [LinkedIn](#) and [Facebook](#).

SOURCES:

1. <https://www.delltechnologies.com/asset/en-us/solutions/financing-and-payment-solutions/industry-market/idc-infobites-circular-economy-it.pdf>
2. <https://www.statista.com/topics/3409/electronic-waste-worldwide/#topicOverview>
3. <https://www.studocu.com/en-us/document/gonza-ga-university/sustainable-business/waste-stakeholders/16799571>
4. <https://www.statista.com/statistics/1154905/projection-ewaste-generation-worldwide/>
5. <https://www.csoonline.com/article/3622257/why-it-asset-disposal-is-still-a-security-risk.html>
6. <https://www.csoonline.com/article/3622257/why-it-asset-disposal-is-still-a-security-risk.html>

Corporate Headquarters

Zones, LLC
1102 15th Street SW, Suite 102
Auburn, WA 98001-6524

© 2022 Zones, LLC. All rights reserved. Zones and the Zones logo are trademarks or registered trademarks of Zones, LLC. Other names may be trademarks of their respective owners.

Consider **IT done**

Visit zones.com or call **800.408.ZONES** today.