



2022

8th Annual ITAD Benchmarking Report

MANAGING IT ASSET RETIREMENT DURING A PANDEMIC

Find additional information at:
Cascade-Assets.com/Cascade-Benchmarking-Report/

About This Report

This report provides information and research on security, environmental, and financial issues related to IT Asset Disposition (ITAD) and the more general IT Asset Management (ITAM) discipline.

The findings presented in this report were derived from the following set of research and analysis:



SURVEY RESULTS

Cascade's annual benchmarking survey compiled detailed responses from 69 enterprises and organizations collectively representing about 125,000 employees.



PROCESSING DATA

More than 890,000 assets processed by Cascade for IT asset disposition between 2019 - 2021 were evaluated and analyzed for disposition trends.



MARKET RESEARCH & INSIGHT

An analysis of key topics impacting ITAD decisions is presented throughout this report.

As a benchmarking tool, we encourage you to use the information to help understand how your ITAM/ITAD program compares to others and how you can further improve your systems to better attain your desired outcomes.

Cascade can also use this body of knowledge to compare your organization's IT asset disposition activity against this benchmark and the leaders in the industry to identify areas of growth and strategic development. **Contact us for more information and an individual consultation.**

Throughout COVID, average resale values of retired assets grew by

Key Takeaways

THE LONG-TERM IMPACTS OF COVID ON ITAD

Nearly two years into the pandemic, several trends emerged that impact the management of IT Asset Disposition. Survey respondents reported permanent increases in the number of employees working from home, creating a greater need for improved residential reverse logistics of retired devices. Only a portion of organizations (35%) resumed pre-pandemic disposition activity, suggesting a continued backlog in IT asset replacement. Market data about refurbished asset sales show a second year of double digit increases in average resale values, indicating strong demand for used IT equipment likely resulting from tight supply chains and continued demands for remote school and work computing.

DATA SECURITY DOMINATES DISPOSITION

Continued updates to the Morgan Stanley disposition data breach and increased hacking incidents have likely driven more organizations to firmly place data security as their first disposition priority. The criteria of “Managing Data Security and Privacy Risks” as “Critically Important” gained more votes in this year’s survey than the next three options combined. Sixty percent of respondents reported they rely exclusively upon their disposition vendor for data destruction.

CUSTOMER SERVICE GROWING IN IMPORTANCE

New to the survey this year, “Quality of Customer Service of ITAD Provider” was added to the options for ranking criteria when organizations dispose of IT assets. Surprisingly, it received the second most “Critically Important” votes just ahead of “Managing Environmental Risks”. Although the environment rebounded with more “Very Important” votes, it still speaks to the rising need of convenience for IT teams. Also worth sharing, many respondents suggested the ease of scheduling pick-ups and integration with IT Asset Management systems drove their disposition decision-making.

42.2%

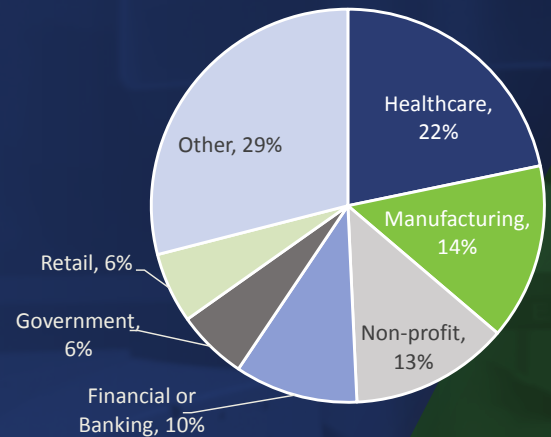
Based on the change in average rebate values paid by Cascade to its customers for equipment refurbished and resold in 2021 compared to 2019.

Demographics

Which term below best describes your industry?

Participants in the benchmarking survey identified with 14 different industry sectors. Healthcare, manufacturing, and non-profits (some of which are affiliated with healthcare or municipal organizations) made up about half of all respondents. Industries represented in the “other” category include insurance, distribution, IT services, research/science, professional services, and construction.

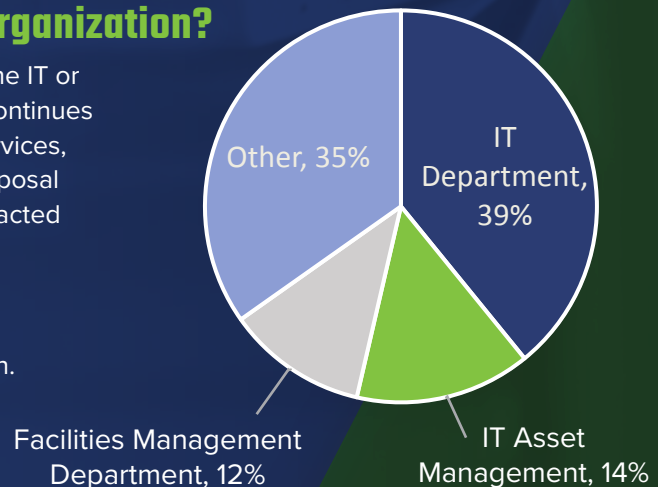
Nearly all of these industry sectors are experiencing strong growth during the pandemic. Noticeably absent are industries suffering the most in Covid - travel, entertainment, restaurants, and lodging.



Which best describes your role in your organization?

More than half of participants in this year's survey are from the IT or IT Asset Management programs in the organizations. This continues the shift away from facilities management, environmental services, and other “waste disposal” roles historically handling the disposal of electronics. That shift in roles and responsibilities has impacted IT asset disposition decisions and values over the years.

Other roles participating in the survey include finance departments, environmental programs, procurement, supply chain departments, and executives at the organization.

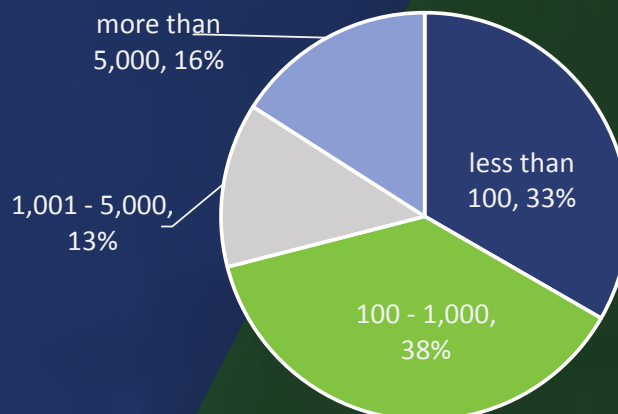


How many employees are at your organization?

(ALL SITES WITHIN THE US ONLY)

The sizes of the organizations participating in the study ranged from small and medium size businesses to about 16% that supported more than 5,000 employees.

On average, the employee size of survey participants was just over 1,800 people. We estimate the aggregate number of employees represented by survey participants was about 125,000 people.



CASE STUDY: Refreshing 10,000 assets during Covid

Challenge

Heartland Dental needed to replace about 10,000 Windows 7 desktop PCs with new Windows 10 machines at nearly 1,000 of its sites across the nation. In addition to the desktops, there were many servers and other miscellaneous equipment at each location that required proper disposition. To top it all off, they started this project just before the pandemic, but COVID-19 couldn't slow them down. Here were some of their challenges:

- ▶ The retirement of their old computers needed to be timed with the installation of new equipment.
- ▶ Logistics were required across the United States to ensure a convenient and cost-effective equipment removal process while the work environment was upended during the pandemic.
- ▶ Collected hard drives needed to be cataloged and securely stored for three to twelve months to satisfy potential requests to retrieve missing data.
- ▶ The value generated from the refurbishment and resale of its retired IT assets ideally should cover all project costs.

SOLUTION

Managing this refresh and retirement process required Heartland Dental to coordinate with partners to find solutions that addressed the following considerations.

SECURITY

- ▶ Heartland Dental recognized that protecting the data on their retired devices was critical. They first established a company policy on data retention and destruction for their retired hardware and ensured all participants in the refresh program could meet those requirements.
- ▶ Transparent and detailed reporting of asset disposition allowed Heartland Dental to maintain a solid inventory of their assets to the point of final data destruction and allowed them to meet HIPAA privacy protection demands.

SAVINGS

- ▶ By carefully handling the retired equipment to reduce damage while shipping, Heartland Dental was able to work with its ITAD partner to refurbish and resell over 77.4% of its assets, yielding revenue offsets that more than covered all of its collection, transportation, data sanitization, and processing costs.

SUSTAINABILITY

- ▶ By centralizing the asset recovery process, Heartland Dental could control the disposition of its assets through a certified processor. This removed the burden of local offices having to navigate a complex and confusing search to find responsible recyclers that won't harm the environment.

SATISFACTION

- ▶ Heartland Dental needed to keep its local office workers and IT technicians focused on their work and be confident any partners met their quality service requirements. Their healthcare workers had enough to deal with in a pandemic. Worrying about computer recycling was not on their radar.

See how Heartland Dental made this project work in the pandemic.

Cascade-Assets.com/Case-Studies/Heartland-Dental/

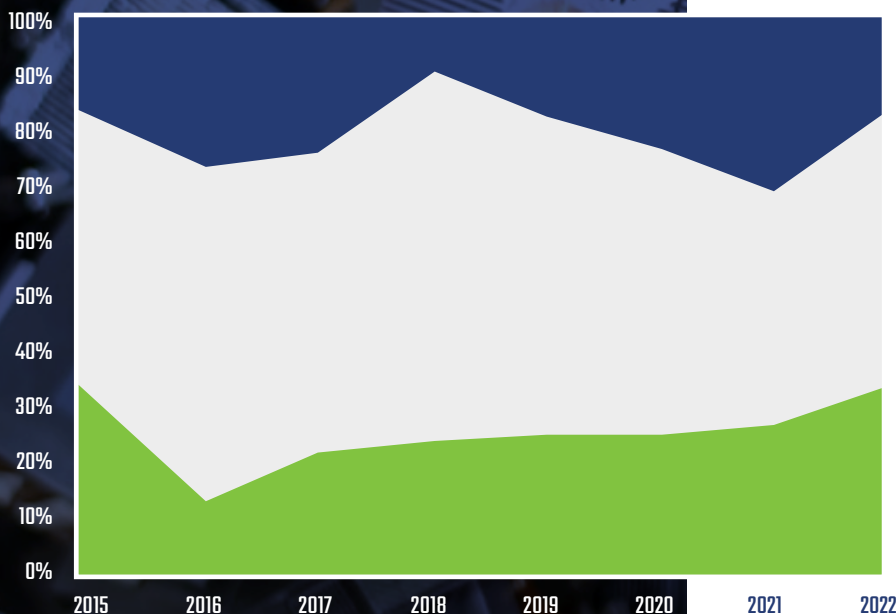
IT Hardware Trends

IT DEVICE SPEND:

This year's survey revealed a bullish perspective on IT hardware investments for 2022. **Over 80% of respondents who reported on their planned IT purchases indicated they will maintain or grow their IT device investments in 2022**, the most ever recorded by Cascade. Just under 20% of respondents plan to spend less next year, the lowest figure since 2018. This bullish IT investment forecast demonstrates a strong rebound from cautious approach to IT procurement earlier in the pandemic.

In comments from the survey, companies are hoping supply chain issues can resolve themselves to allow these organizations to catch up on IT purchases. Other companies indicated that they are organically growing or acquiring other companies, necessitating the purchase of more hardware.

How much do you expect to spend on IT hardware?



IT Device investments are predicted to increase in 2022

4.25

is the average age (in years) of laptops and desktops retired

3

is the average age (in years) of smartphones retired

48%

of organizations don't provide corporate owned smartphones



Spend **LESS** next year than this year

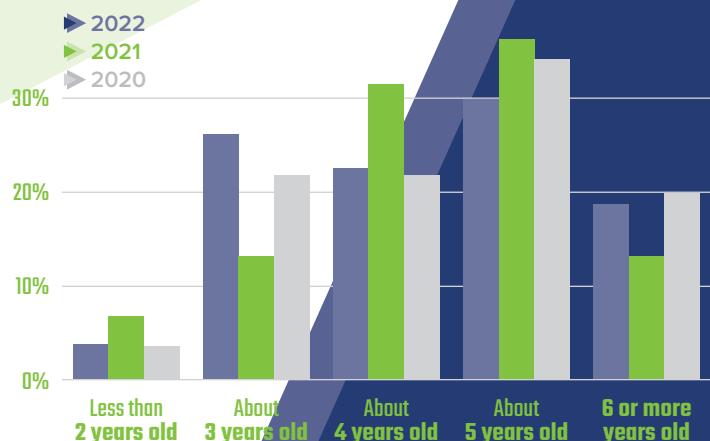


Spend about the **SAME** next year as this year

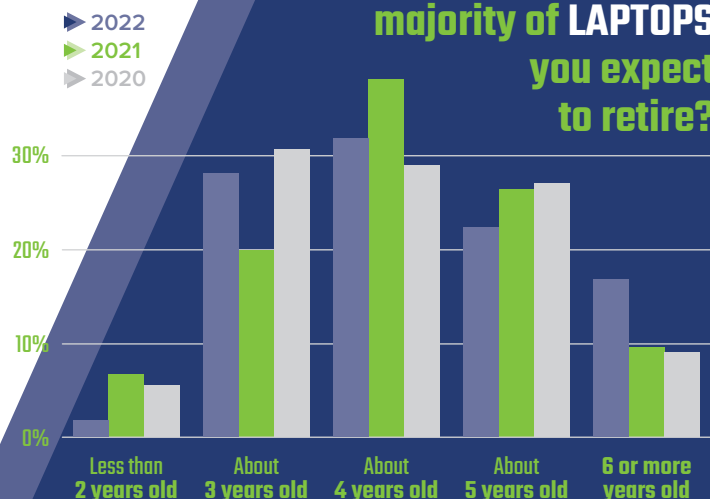


Spend **MORE** next year than this year

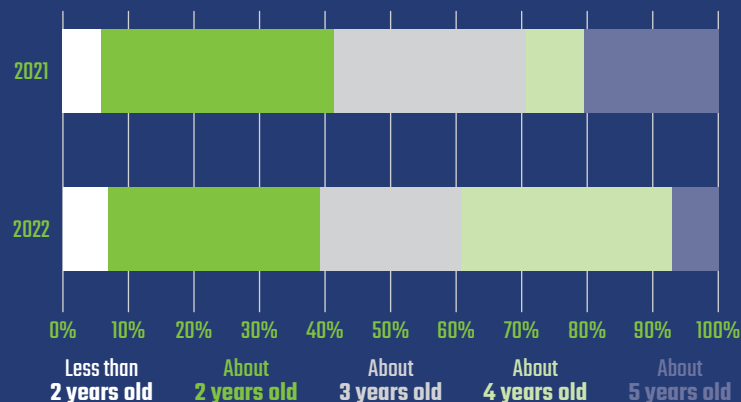
How old are the majority of DESKTOPS you expect to retire?



How old are the majority of LAPTOPS you expect to retire?



How old are the majority of SMARTPHONES you expect to retire?



DESKTOP TRENDS:

Going into 2022, a significant number of organizations (29.6%) plan to retire desktops that are 3 years old or newer; a more than 50% increase from the previous year. Overall, respondents indicated the average age of the desktop devices they plan to retire next year is 4.3 years old.

There's a wider spread in the age of desktops destined for disposal this year than in previous years. It appears some companies are planning to convert their desktop environment to a more mobile friendly set of workstations driven by changing workforce needs from the pandemic. Other companies are holding onto their desktops longer, mainly because there's less of a demand to replace these under-utilized assets. Finally, Cascade is also seeing a significant shift to thin client devices in company retirement activity.

LAPTOP TRENDS:

Our survey indicated a significant increase in the number of three-year-old laptops entering retirement. Overall, the number of laptops planning to be retired that are 4 years old or newer (61%) is about the same as in the previous years.

We're not seeing as much of a change in the average age of laptops entering retirement (4.2 years) as the age of these devices is similar to the age of desktops entering retirement.

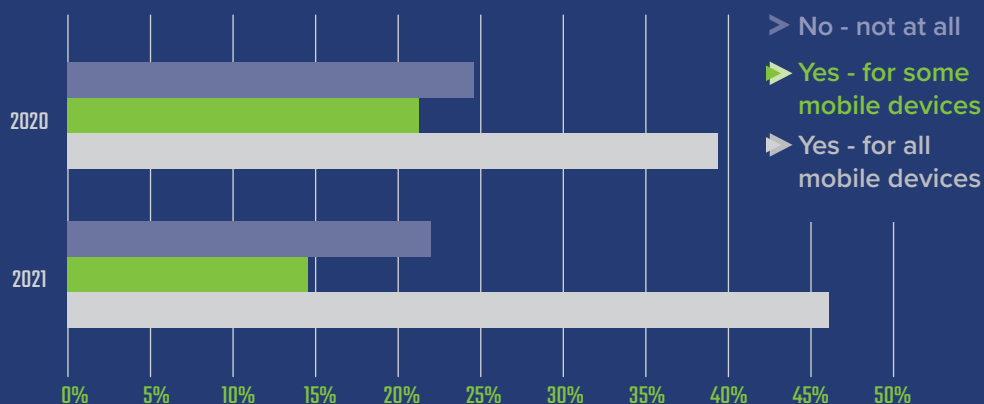
SMARTPHONE TRENDS:

This is the second year we asked about smartphone retirement. While 48% of respondents indicated their organizations do not own smartphones (instead, many use the BYOD approach), the remaining participants indicated a wide range of age of their phones at retirement. About 40% of them reported their retired smartphones will be 2 years old or less; 21.4% will be 3 years old at retirement; and 32.1% will be 4 years old or less. Over the past two years, the reported **average age of smartphones at retirement is about 3 years old.**

Mobile Device Management

Our survey again indicates organizations continue to evolve in their programs to secure and control data on mobile devices and SSDs, which are becoming the predominant storage media at the end-user computing level. **The percentage of organizations with some level of Mobile Device Management (MDM) implementation remains steady at about 61% over the past two years.** The number of respondents that indicated they do not have an MDM program in place dropped two percentage points to 22%.

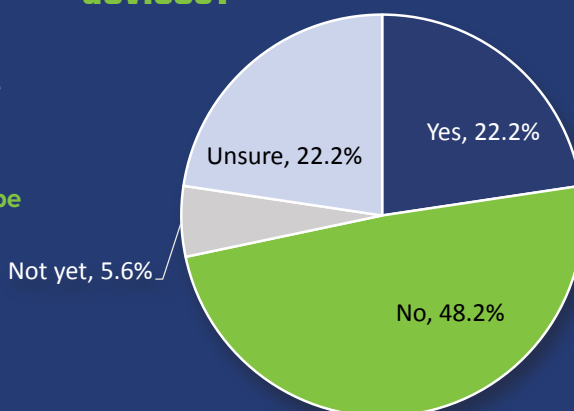
Do you maintain a Mobile Device Management solution for your phone/tablets?



ANTI-THEFT DEVICE TRACKING

This year, we asked respondents to indicate whether they install a tracking tool to monitor and remotely lock or wipe their laptops. Services like Computrace® by Absolute Software can be installed on the BIOS of a device and use a “persistence technology” to load an agent onto the hard drive/SSD of the device to “call-in” to the tracking service whenever the device is connected to the Internet. Users subscribe to this service to allow them to track, disable, or remotely wipe the drive of the device. **About half of the respondents (48.2%) do not subscribe to this service.** Just over 22% are already using this tool and another 5.6% plan to install it. The remaining (22.2%) were unsure if their organization has this capability.

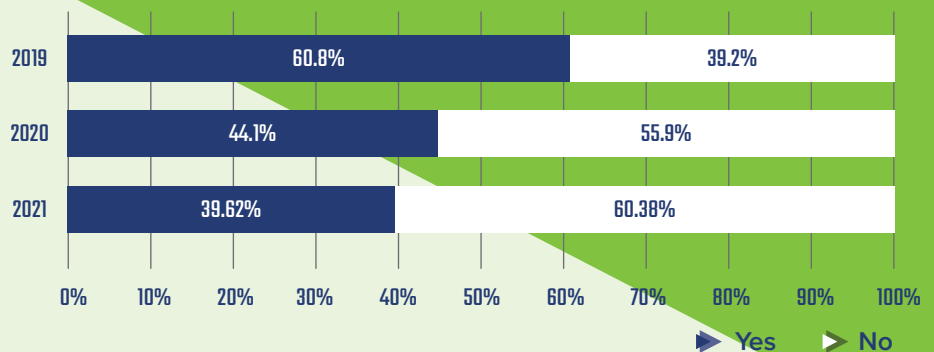
Do you use any device anti-theft or tracking services on your mobile devices?



PHONE AND TABLET DATA DESTRUCTION

For the second year in a row, respondents indicate they are doing less internally to destroy data on their mobile phones and tablets. Instead, they rely more on their third-party disposition or trade-in partner to wipe the data from these devices.

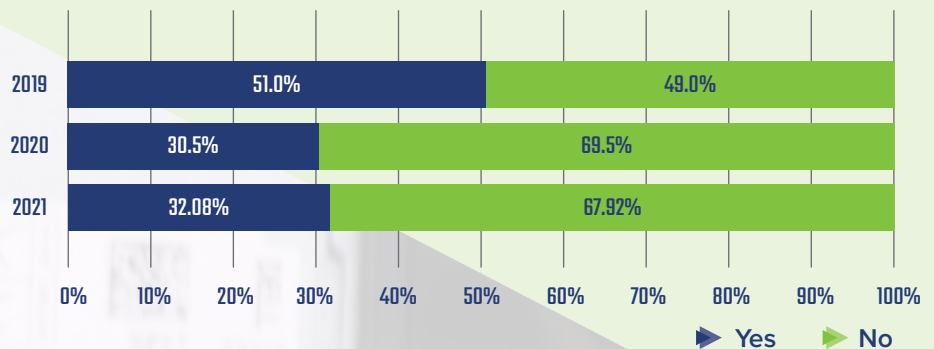
Do you have an internal process in place to destroy data on mobile devices (phones and tablets)?



SSD DESTRUCTION

More than two-thirds of respondents indicated they do not have an internal process to sanitize data from SSDs prior to disposal. Part of the challenge with SSDs is the variation and complexity to fully sanitize these devices and ensure the data is wiped clean, so companies are turning to their disposition partner for assistance.

Do you have an internal process to clear data on Solid State Drives prior to disposal?

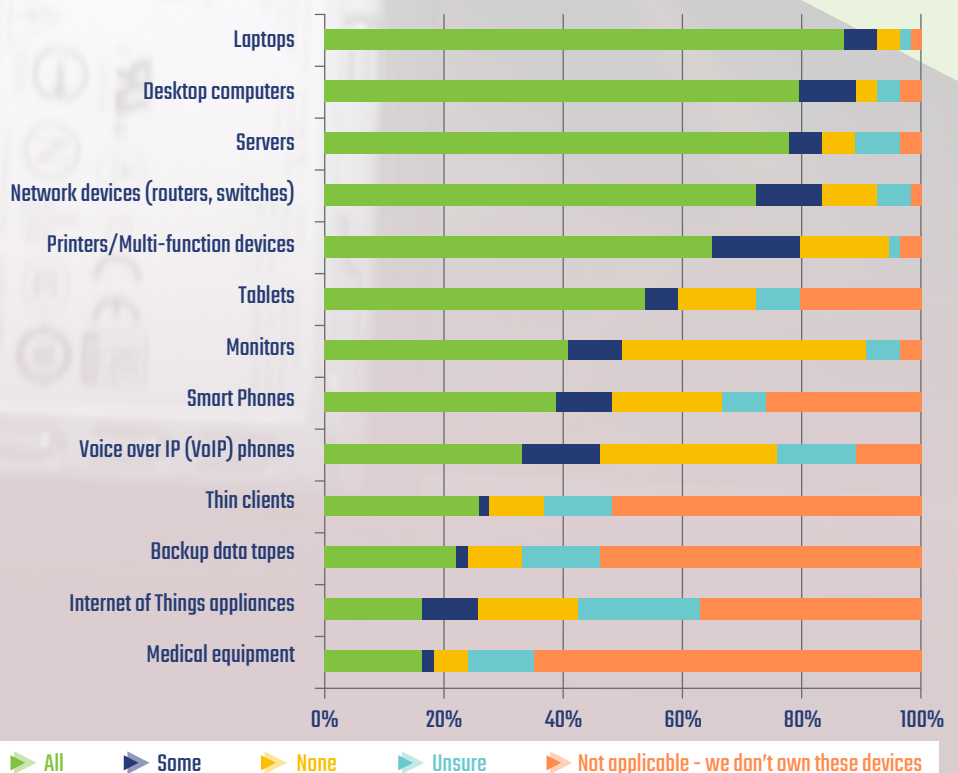


ASSETS TRACKED

Tracking assets to their final disposition is the best liability protection for an organization. If you need to prove a device, and the data stored on it, was properly managed throughout its lifecycle, detailed asset tracking is essential.

In our annual question on this topic, the top six types of assets companies track remains the same. What continues to be surprising is that many respondents indicate they do not track any of their tablets (13%) or smart phones (18.5%). Since these devices tend to hold good value and retain customer data, tracking these assets should be considered.

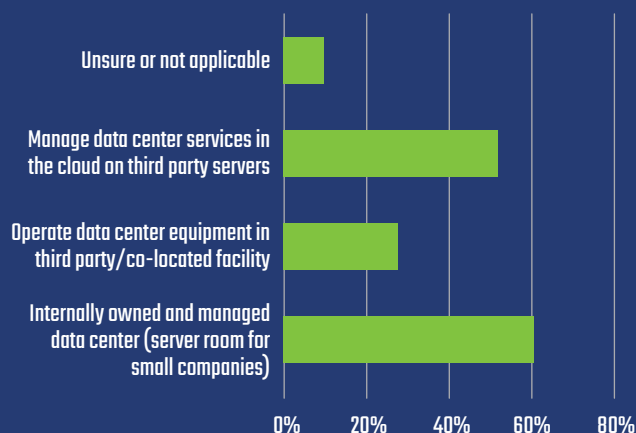
What types of assets do you track?



DATA CENTER OPERATIONS

For the past few years, respondents consistently report they maintain both internal data centers or servers while relying on cloud services for other applications. **This year, over 61% of respondents still indicate they own and manage their own data center or server room.** Cloud services are often relied on for backups and third-party hosted applications. In addition, over 27.8% of respondents operate data center equipment in co-located facilities.

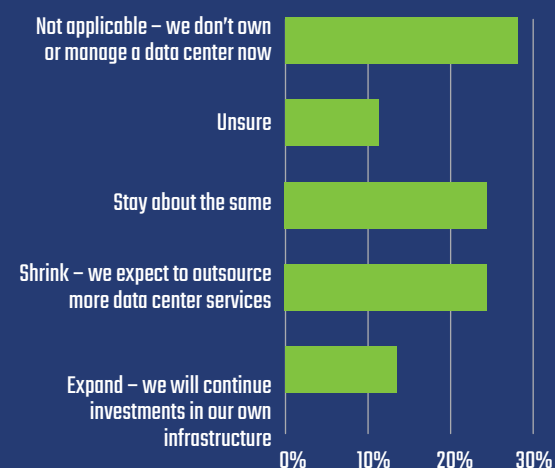
What types of data center operations do you use? (select all that apply)



DATA CENTER TRENDS

Compared to last year, a smaller percentage of companies expect to expand their owned data center operations (down from 16.4% to 13.0%). Meanwhile, the percentage expected to keep their data centers at about the same size increased from 18.0% to 24.1% this year. The same percentage (24.1%) expect to shrink their internal data centers in the future, down from 26.2% last year.

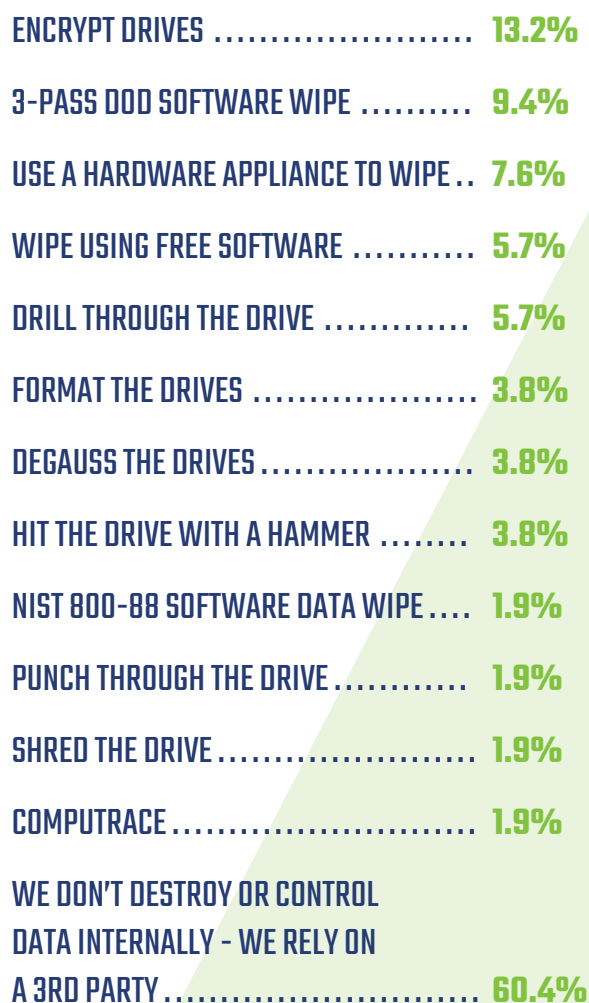
If you own and manage a data center, do you expect it to expand or shrink over the next five years?



METHODS TO DESTROY DATA ON HARD DRIVES

What methods do you use (internally) to control and destroy data on hard drives?

Select any that apply

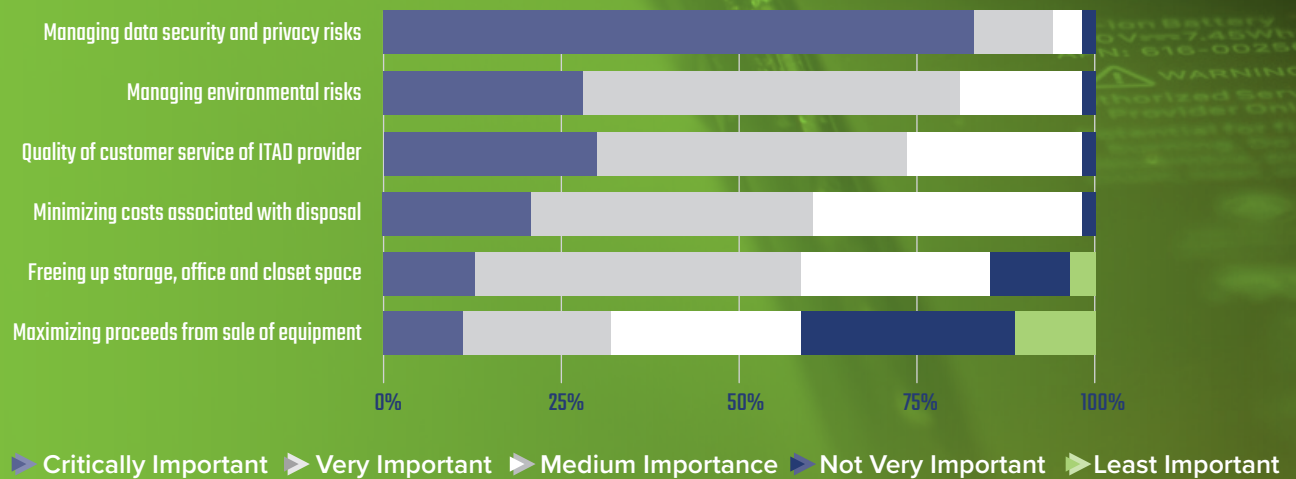


CRITERIA CONSIDERED WHEN DISPOSING OF IT ASSETS

Each year we ask a question about what influences a company's decision-making process when retiring their IT assets. This year, we added a new criteria for consideration; the **quality of customer service** from the ITAD provider. While all other criteria continued

to rank the same as in prior years, with "security" ranking as the top concern and "maximizing proceeds from the sale of equipment" as the lowest concern, "quality of customer service" assumed the number three spot, close behind managing environmental risks.

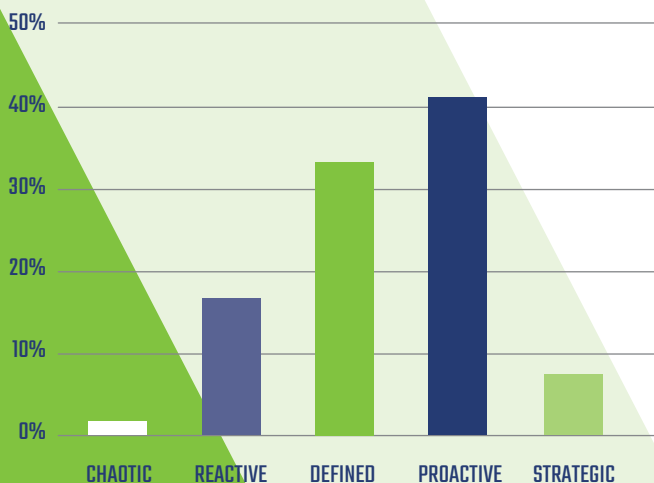
How important are the following criteria when disposing of your IT assets?



Quality of Customer Service ranked the second most critically important factor when disposing of IT assets

STAGE OF MATURITY

This year, more companies considered their ITAM and ITAD processes to be either Proactive or Strategic. Perhaps the pandemic is giving them the chance to better organize their processes and their IT assets.



Where do you see your organization in the ITAM/ITAD maturity model?

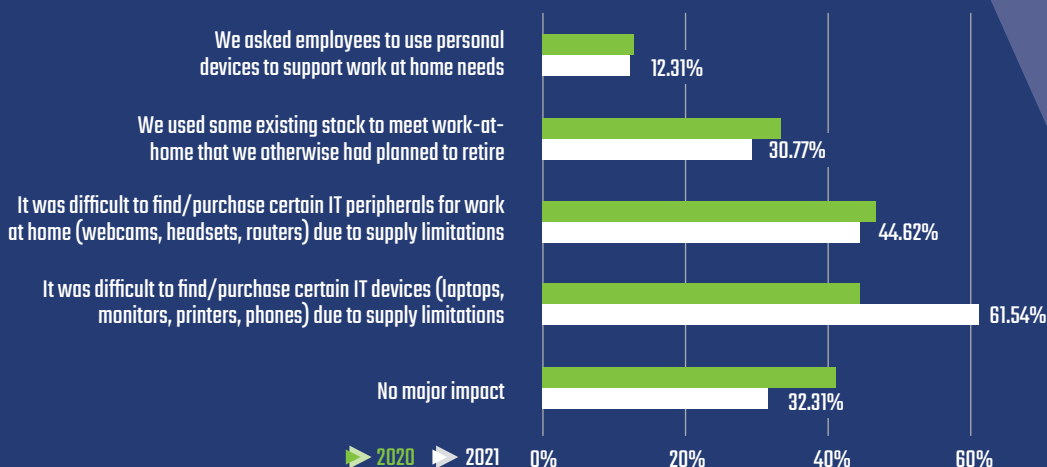
- **Chaotic:** No control over IT assets; no policies, procedures or tools; isolated decision-making.
- **Reactive:** Little control over assets; limited policies and programs; disparate lists of assets managed independently.
- **Defined:** ITAM policies, procedures, and repository in place; data gathered centrally, but not validated; minimal use of data in decision making.
- **Proactive:** Control of assets; policies, procedures, and repository in place; comprehensive, reliable, and accurate data; assurance controls work.
- **Strategic:** Duly integrated solution with continual business process improvements in place; ITAM is a strategic element that adds value to the organization.

COVID-19

IT PROCUREMENT IMPACTS

For the second year in a row, we asked participants to tell us how the pandemic has impacted their IT procurement and ITAD programs. While the responses were similar for most questions from one year to the next, there was **a significant increase (38.9%) in the percentage of respondents saying supply chain issues made it difficult to find certain IT devices in 2021 versus 2020.**

This reflects other reports showing supply chains have been more disrupted lately as both the demand for product has increased and the supply of critical materials and computer chips has limited the availability of computer equipment recently.



2022 ITAD EXPECTATIONS

When we asked respondents how they expect the pandemic will impact their ITAD decisions in 2022, 35.4% said they expect to revert to pre-pandemic disposition volumes, which are generally higher rates of asset retirement. In addition, 52.3% of respondents indicated their disposition rates will stay at their current levels.

Some individuals noted they expect an increase in disposals once they can purchase more new equipment.

Survey respondents reported a 57.6% increase in employees working from home since pre-pandemic

38.9% more respondents said supply chain issues impacted them in 2021 versus 2020.

Read more about ITAD & COVID-19

Cascade-Assets.com/Covid

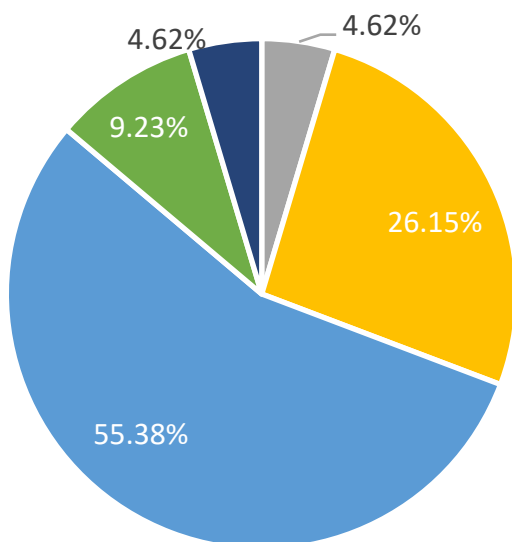
ITAD IMPACTS

As in 2020, the majority of respondents indicated the pandemic did not impact their ITAD activities in 2021.

Just over 30% saw some type of decline in their ITAD activity in 2021 due to Covid-19 (compared to 40% in 2020).

There were more organizations (13.8%) reporting an increase in ITAD activity this year compared to the previous year when only 3% of organizations said their ITAD activity was higher.

How did the pandemic impact your ITAD activity in 2021?



- ▶ Greatly reduced disposal activity versus normal rates
- ▶ Slightly reduced disposal activity versus normal rates
- ▶ No major impact on disposal activity versus normal rates
- ▶ Slightly increased disposal activity versus normal rates
- ▶ Greatly increased disposal activity versus normal rates

WORK AT HOME

Based on the responses from this year's survey, **twice as many people are working at home compared to before the pandemic**. It is expected that over 30% of this group's workforce will continue to work from home one year from now, which is a 57.6% increase in the number of employees working from home compared to before the pandemic. The work environment is shifting. IT asset managers need to adapt and coordinate a much more mobile workforce than ever before.

What percentage of your organization's workforce work-at-home a majority of the time?

BEFORE THE PANDEMIC

19.1%

DURING THE PANDEMIC

38.2%

ONE YEAR FROM NOW

30.1%

Resale Trends

RESALE VALUES

Cascade refurbishes and resells used computer equipment generated by its clients. The devices are from a wide range of industries and are predominantly 3 to 5 years old. The prices shown in this graph represent the average cash price paid to Cascade after all shipping, merchant fees and listing fees are deducted from the sale. Cascade shares a percentage of this value with clients.

Over the past three years, the average price paid for refurbished desktops, laptops, and monitors has steadily increased. There's more variability in the price paid to Cascade for smartphones, tablets, and network devices, primarily because the markets are less mature and Cascade has a smaller supply of these products.

For those companies with a managed ITAD process that minimizes damage to equipment, retires IT devices on a set schedule, and promotes reuse of their equipment at requirement, their ITAD program can more than pay for itself from the sale of their retired IT assets.

The prices paid for refurbished equipment continued to rise in 2021, partially due to supply chain disruptions making it difficult to source new equipment and increasing demand for refurbished gear.

Average resale value by device in 2021:

\$110.65

Laptops

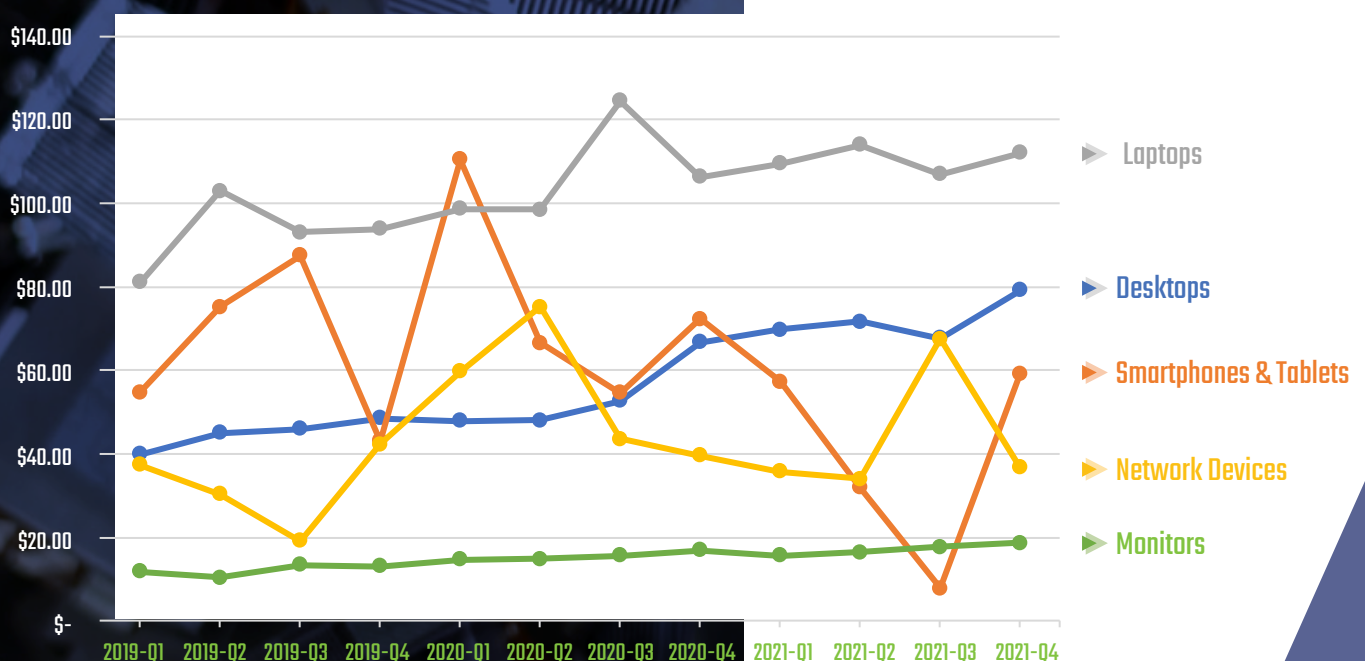
\$238.87

Servers

\$72.10

Desktops

Processing Data – Resale Values



Resale of Devices



LAPTOPS:

Laptop values remain considerably strong in the reuse market as more people need a quality mobile device for work at home. Over the past three years, the price paid for Cascade's refurbished laptops grew by 19% with the average value received by Cascade for laptops by the end of 2021 reach over \$112 each.



SERVERS:

The category of refurbished devices with the highest average value and growth rate is servers.

The average resale value of Cascade refurbished servers was over \$238 in 2021. Over the past three years, this resale value has grown by over 71%!

Though servers have a specialized resale market, the demand for these devices and the critical parts that they may contain has driven up the market value for these products.



DESKTOPS:

While desktops are less predominant in the market, they still account for the largest category of devices processed for reuse by Cascade (at 35.1%).

While lower in resale value than laptops, we saw desktop computer values grow at a higher rate (29%) over the past three years. Some of the recent growth may be due to the lack of access to new desktops.



**Cascade offers refurbished
computers for sale to individuals at
market.cascade-assets.com**



CASCADE

ASSET MANAGEMENT

"I have enjoyed a long association with Cascade, from my previous job through today. Cascade is fantastic to work with, proactive and thorough. From our account rep through the crews coming onsite, we are impressed with the quality and scope of services. We support and encourage any and all initiatives Cascade is involved in to further "Green" our processes as we are also furthering our own Green Certification level. A great partner!"

Randy Rybakowicz,
Horizon Home Care and Hospice

"Excellent service and value while doing right by my organization and the environment."

Mike Tallman,
One Community Bank

Learn About Our services

Cascade-Assets.com/Solutions
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608.316.6625

Schedule a Pick-up

Cascade-Assets.com/Pickup
pickup@cascade-assets.com
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