

# DATA CENTER DISPOSITION CASE STUDY

An upcycling success story that improves data, financial, and environmental results for this top-five bank.



# THE CLIENT

**OVERVIEW** The client is considered one of the top five banks in the world. They are a large purchaser of servers and data center infrastructure. The company retires 10,000 to 20,000 servers per year.

**PROBLEM** The company knew there was a better way to dispose of their servers. Because of the complexity of the data erasure process for three separate manufacturers, they opted to just recycle everything despite the significant residual value and environmental benefits of reuse.



## Data Security

Data security was their first concern. Their current solution was to destroy and recycle everything. However, data can still reside on the firmware, which is often overlooked.



## Reporting

Performing firmware resets isn't difficult, but the validation can be. The existing .xml files were thousands of lines long. With the lack of time and resources, they were unable to validate that the firmware had been reset.



## Sustainability

Reuse delivers a far greater environmental benefit than recycling because a four-year-old server still has substantial useful life remaining.



## Recovered Value

Their approach to data destruction meant the client was leaving millions of dollars on the table due to their risk concerns.



# CUSTOM SOLUTIONS

## PROCESS ROADMAP



### Data Security

Our Project Management and Field Services teams were onsite to perform the reset, export the logs for every server, and upload the files for review. We worked with multi-national compliance teams during a prolonged pilot phase to make sure they were satisfied with validity of firmware erasures, as well as a fail-safe plan if the servers reached our warehouse without these records.



### Logistics

We partnered seamlessly with Data Center Operations to supply much needed resources in six data centers to help them execute the wiping and removal. Apto provided a strong chain-of-custody plan including tandem drivers, GPS, and dock reporting.



### Reporting

Apto designed a proprietary tool that was able to intake lengthy .xml files and produce a clear set of results, including 12 columns of pass/fail, rack numbers, and serial numbers.

| BIOS Cleared | OS Driver Deleted | iDRAC Module Deleted | SupportAssist Non-Volatile Storage Deleted | ePSA Data Deleted |
|--------------|-------------------|----------------------|--|-------------------|
| ✓            | ✓                 | ✓                    | ✓  | ✓                 |
| ✓            | ✗                 | ✓                    | ✓  | ✓                 |
| ✓            | ✓                 | ✓                    | ✓  | ✓                 |
| ✓            | ✓                 | ✓                    | ✓  | ✓                 |
| ✓            | ✓                 | ✓                    | ✓  | ✓                 |

In addition, our pre-sale process sent audit reports, photos, and firmware erasure reports to be examined by compliance team prior to resale.



### Recovered Value

Apto's proprietary auction process maximized the resale value of \$8MM over a six-month period.



# SUSTAINABILITY

We showed the client that there was a better way to accomplish goals through upcycling that improves data, financial recovery, and environmental impact.

## Sustainability Metrics

**30,100 MT**

Quantity of E-Waste Treated

**1,242,900**

Estimated GHG Emissions Avoided

## Equivalencies

**310,700**

Miles Driven

**122,100**

Gallons of Diesel

**259**

Homes Powered

Our partnership with Bloom ESG's ISO-verified methodology allows us to produce key metrics for every client. These reports summarize the avoided greenhouse gas (GHG) emissions. This is the result of recycling and refurbishing that allows valuable materials and assets to be recovered, reducing reliance on virgin material production and the associated energy use of emissions.





# INNOVATION. SECURITY. SUSTAINABILITY.

Meeting this challenge for the client introduced bonus rewards throughout the process.

Identifying the gaps and using an agile, innovative approach, our proprietary reporting tool can now expand into product categories outside of data center servers. We can now apply this approach to storage and networking and end user devices as well.



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