SHI ITAM Lab: optimising lab energy efficiency

ENTERPRISE · ITAM LAB

SHI were looking to increase the capacity of their ITAM lab due to high use and limited available compute for growth. They needed to increase performance while reducing environmental impact.

40%
energy reduction

143%
increase in maximum performance

65%
procurement saving

What we did

SHI utilised Interact to establish current energy efficiency and performance benchmarks and identify solutions. Three options were presented ranging from total replacement, partial upgrade and addition of servers and comprehensive component reconfiguration utilising refurbished components. Each option would deliver the desired outcome with different costs and benefits.

The results

SHI went with complete reconfiguration using refurbished components to reduce impact on critical raw materials and scope 3 carbon. Once the work was completed, they monitored performance and impact.

Selecting the refurbished reconfiguration had saved over 65% in procurement costs while decreasing total energy used by 40%. Available capacity also increased 1.5x (143%). By utilising the refurbished option, they decreased their scope 3 impact from 4,500 Kg co2e to only 40 Kg co2e for the project.

- Significant increase in performance - their lab was now able to work at the capacity their business needed
- Increase in per watt efficiency of 148% moving them from a grade C to an A for energy efficiency
- Increase in maximum capacity of 143%
- Decrease in Carbon and energy consumption of over 40%
- Saved money - both on the initial upgrade but also for the ongoing energy costs