

Large European Bank

Quantify carbon footprint, reduce cost and emissions

Business Need:

operations

- Quantify the carbon footprint
- Identify opportunities to reduce cost and carbon emission of IT

Solution:

- IBM Consulting, IBM Research and the Bank worked together to implement the Research asset CARE to measure the carbon footprint of the Bank's data centers. Based on the carbon emission and patterns, IBM identified the hotspots and optimization options for the Bank's IT infrastructure that would reduce both cost and carbon emission of IT operations.
- Carbon footprint analysis of the data center led to the following optimization options for the bank:
 - Decommission 27 hosts that run 35 VMS
 - Identification of outliers that show sudden drop/spike in utilization on specific dates as candidates for right sizing the VMs

Outcomes:

- By decommissioning the 27 hosts and 35 VMs there is an opportunity to save **7.4 Metric tons** of CO₂ per year



BlueIT

Accelerating digital transformation and reducing environmental impact

Business Need:

- Helping their clients implement an IT strategy that not only assures performance but also supports their sustainability goals
- and puts them on a path to reducing carbon emissions
 - Shift from traditional ITOps to AIOps

Solution:

- There were 3 main areas of focus: ITIL Services, Cognitive Services and Business Services. Their services include but are not limited to multicloud management, application performance management, continuous vulnerability and compliance monitoring as well as application resource management.
- Due to the heterogeneity of their clients' environments, it was critical for the team to have the tools they need to onboard each new client efficiently and continuously. Turbonomic provides AI-powered application resource management, while Instana provides infrastructure monitoring and observability.

Outcomes:

- Executes resourcing decisions **60% faster**
- For one client, BlueIT achieved **10% reduction** in memory and CPU over-allocation
- Reduced MTTR **50%** across the organization



Carhartt

Delivering a cloud-first strategy using IBM Turbonomic

Business Need:

- Expand from its original blue-collar roots to a brand tailored for younger consumers

- Better handle increased demand for their products

Solution:

- The IBM Turbonomic software identified opportunities for improvement, including adjusting Java Heap sizes, powering off low-use systems, adjusting VM hardware for best performance, and consolidating VMs for performance as well as efficiency.
- By integrating Turbonomic's resourcing actions into the company's ServiceNow workflows, Carhartt is beginning to automate VM resizing as well.

Outcomes:

- 15% improvement in resource utilization
- Carhartt also improved the efficiency of its cloud environment by 45% while assuring workload performance



IBM Hursley

Driving innovation while minimizing environmental impact

Business Need:

- Achieve IBM's goal of reaching net zero greenhouse gas emissions by 2030

Solution:

- With Turbonomic, the IBM Hursley team can quickly identify inter-dependencies of the logical environment throughout the physical data center and reallocate resources to assure performance.
- Deploying Turbonomic at this level of the stack provided much deeper visibility of those workloads and helped the team quickly resolve performance issues.
- Because Turbonomic helps the team identify opportunities to rebalance resources across the IBM Hursley data center, the team is now better equipped to maximize their utilization of their existing infrastructure without sacrificing performance.

Outcomes:

- Optimized 6,000 virtual systems with the help of Turbonomic
- Those who rely on IBM Hursley's data center include 11,000 developers

