IBM

A legendary brand achieves record holiday sales

How Carhartt delivers a cloud-first strategy with Turbonomic

6-minute read

Carhartt has been one of the hardest-working companies in America since its founding in Detroit in 1889. Originally designed for rail workers, Carhartt apparel soon became the choice for workers in automobile production, construction and many other industries.

More recently, Carhartt's blue-collar roots and reputation for creating durable, reliable products has helped the brand expand to include younger consumers, especially those involved in the resurgence of the skilled trades industry. This new market has grown Carhartt's revenue from under USD 100 million in the 90s to nearly USD 1 billion today.

The Carhartt IT team has managed this growth with a combination of old-fashioned hard work and smart technology deployment.

Recently, Carhartt began using IBM Turbonomic hybrid cloud cost optimization software to help its hybrid cloud infrastructure handle dramatic new spikes in demand—including a recent Black Friday.

By automating VM replacement with Turbonomic, Carhartt achieved a

15%

improvement in resource utilization

Carhartt also improved the efficiency of its cloud environment by

45%

while assuring workload performance

"Turbonomic's automated actions not only improve performance, but they free up the team's resources. The team now has more time to innovate rather than focusing on keeping the lights on."

Gary Prindle, Senior Systems Engineer, Carhartt

Rapid growth creates application performance challenges

The Black Friday period is particularly challenging for consumer brands, especially those seeing such rapid growth. An early adopter of Application Performance Monitoring (APM), Carhartt had used AppDynamics software for years to spot code issues and manage performance, but a recent spike in demand created issues between the company's front-end site and multiple back-end systems, including inventory and loyalty systems. Insight from AppDynamics demonstrated that the code was fine, but it could not pinpoint the root cause of the performance problem.

To prepare for the sudden business surge of Black Friday and other seasonal peaks, Carhartt sought greater visibility into application resources and greater clarity into any performance issues.
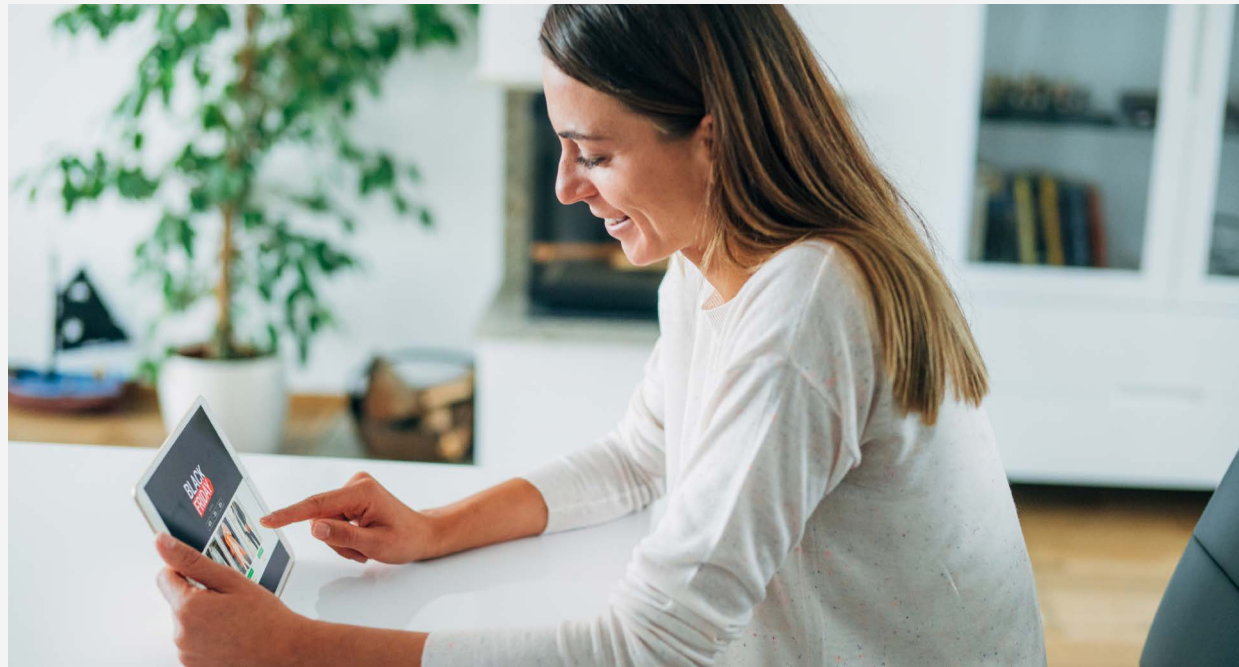
Application-centric analysis in hybrid cloud

Gary Prindle, a Senior Systems Engineer at Carhartt, convinced IT leadership under Tim Masey, VP of IT Infrastructure & Security, to install Turbonomic. Using Turbonomic, the team clarified the resource relationships between

Carhartt's hardware, its virtualization and its APM solution, stitching together the company's complete application stack. The Turbonomic software then 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. Following Turbonomic's prescriptive actions, Prindle and his team were able to prevent performance issues from occurring during the holiday season (and beyond), driving record sales.

Carhartt has fully automated VM placement with Turbonomic, helping improve overall performance while reducing resource consumption by 15%. By integrating Turbonomic's resourcing actions into the company's ServiceNow workflows, Carhartt is beginning to automate VM resizing as well.

Carhartt IT has also been tasked to go 100% public cloud by 2022. By using Turbonomic to optimize initial cloud deployments, the IT team found that they could improve the efficiency of their Microsoft Azure cloud environment by 45%, while assuring workload performance.

Closed-loop automation for greater agility

"Our integration of Turbonomic and AppDynamics creates a closed-loop performance-feedback system that can automate away avoidable issues so we can focus on the unavoidable," says Masey. "We are excited about the ServiceNow-Turbonomic integration which, in a very short amount of time, is already driving greater agility for Carhartt IT—and an even better experience for our customers."

Moving forward, as Carhartt's cloud strategy matures, Turbonomic serves a key role in assuring application performance for all workloads, and Carhartt is looking to take advantage of these additional Turbonomic capabilities:

- Delivering more automation to proactively prevent application performance risk and reduce manual time required to support hybrid cloud cost optimization.

- Applying the Turbonomic-ServiceNow integration for greater agility in the closed-loop performance-feedback

system, in combination with the existing Turbonomic-AppDynamics integration.

- Supporting application performance assurance on containerized workloads

in Carhartt's future IT strategy.

- Ensuring performance and policy adherence of public cloud workloads as Carhartt migrates safely to Azure by 2022.

About Carhartt

Founded by Hamilton Carhartt in 1889 to provide durable work clothing for railroad workers, Carhartt (external link) is now one of the most popular brands of high-quality apparel for any type of hard work. The company is headquartered in Dearborn, Michigan and employs more than 5,500 people worldwide.

Solution component

- IBM® Turbonomic®