Accelerating cloud adoption to enhance healthcare

Providence protects the health of its
cloud and hybrid environment using
IBM Turbonomic

5-minute read

Founded more than 100 years ago to provide healthcare for the poor and vulnerable, Providence continues its mission today through 120,000 caregivers at 52 hospitals and over 1,000 clinics.

Providence's growth and success is based on an openness to new technology and adopting best practices as they evolve.

When the company recently began a migration to cloud infrastructure for greater flexibility and cost efficiency, it applied IBM® Turbonomic® Application Resource Management software to maintain the resilience of critical applications, including those directly involved in providing medical care to patients.

Through optimization,
Providence saved
more than USD

2 million

while assuring app performance during peaks

Safely migrated
more than

1,900

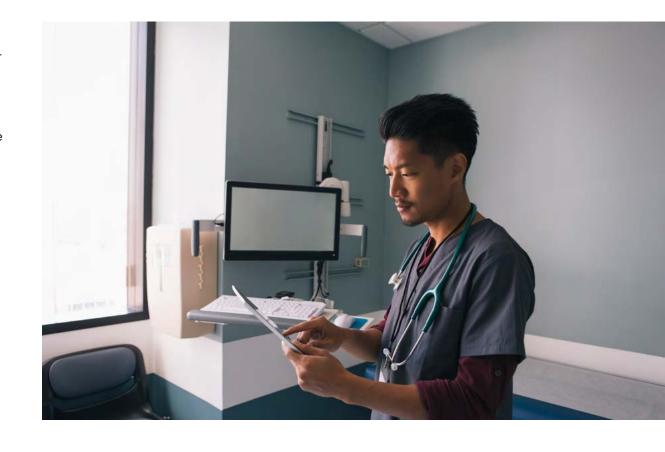workloads to the cloud in 10 months
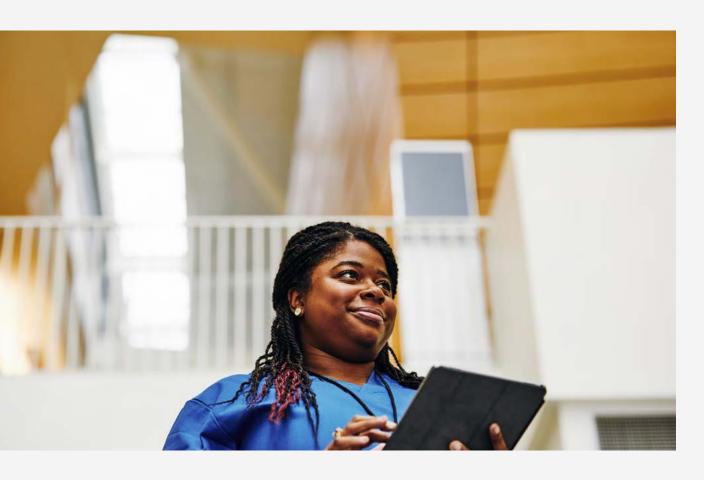
Beginning the migration to cloud

When Rick Stover joined Providence in late 2019 as Senior Vice President (SVP) of IS Infrastructure and Chief Technology Officer (CTO), he was faced with an enormous budget problem that seemed to grow by the day. The COVID-19 pandemic only exacerbated the need to reduce waste and maintain cost efficiency, even as healthcare facilities around the world were faced with the prospect of overwhelming demand for acute care.

Just as the pandemic was beginning, Bryan de Boer joined the Providence team as Executive Director, responsible for the company's Microsoft Azure migration. This migration was in the early stages—and a massive undertaking. In parallel, there were other initiatives in progress to remediate technical debt and rationalize the company's application portfolio.

On top of the technical challenges of the Azure migration, there were also cultural and skills challenges. Extensive use of

commercial off-the-shelf (COTS) products and lack of in-house software development created an application owner community that primarily comprised "application analysts" with limited infrastructure knowledge. This gave control to the third-party application suppliers and put Providence in the backseat, where it couldn't establish common engineering practices and standards needed to modernize the application portfolio. As de Boer recalled: "The very ideas of cloud elasticity, flexibility and optimization were completely foreign to this enterprise … Servers were fixed resources that you bought; they were physical resources that just sat there, and it was a one-time upfront purchase. There was a conceptual paradigm shift that needed to occur."

"Because we had the partnership with Turbonomic, it expedited our ability to execute. It helped us tell the story and gave us better data. Instead of it being a two- or three-year journey for people to start to conceptualize that cloud is elastic, we showed how we could use the cloud to better manage costs and performance."

Bryan de Boer, Executive Director, Providence

Massive savings

The COVID-19 pandemic, however, became a catalyst to accelerate Providence's cloud migration. The Providence team built out a new COVID-19 vaccination tracking and scheduling application that gave the company a use case for the move to Azure. With this rapid test case, the Admin Tech application team proved that they could solve significant problems in a very short period with the agility of the cloud. This became a key proof point in driving the internal cultural change to show the value of cloud infrastructure in driving healthcare innovations that could be quickly and reliably delivered to perform at scale.

Through persistent education of all stakeholders—which de Boer even noted was "fun"—Providence overcame its cultural challenges around cloud and expedited its cloud elasticity journey. In just 10 months, Providence safely migrated more than 1,900 workloads to Azure, with a total infrastructure footprint of about 3,000 workloads. Providence achieved more than USD 2 million in savings through optimization actions while assuring application performance, even during peak demand.
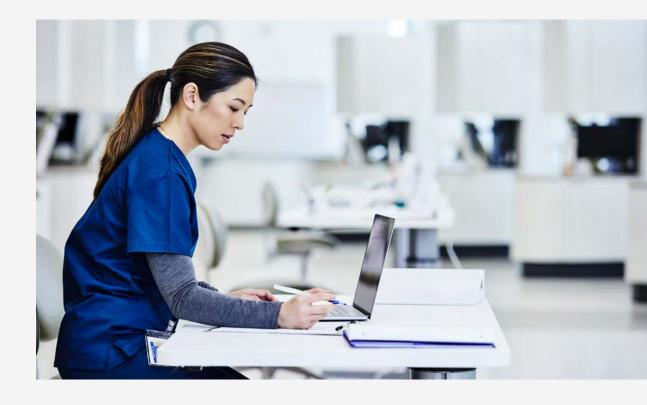
One ingredient to Providence's success was the adoption of Turbonomic, both as an optimization platform and strategic partner. Using Turbonomic, Providence proved that automation actions were safe—especially for the literally life-saving applications required for patients' health.

Not only was Providence able to migrate—it was also able to advance beyond a lift-and-shift approach. At the onset of the Turbonomic adoption, Providence began "Project Tetris," an initiative to optimize the company's on-premises computing resources and clean up its environment as it moved to Azure. By reducing on-premises costs and waste, Providence freed up financial and human resources—which can now be invested into modernization initiatives that provide better healthcare outcomes for patients.

Ongoing transformation

Providence's digital transformation continues apace with its journey to become a modern, industry-leading healthcare services conglomerate. Throughout this journey, Turbonomic will remain an integral part of Providence's strategy, helping simplify the on-premises ecosystem and optimize deployment of new applications on Azure infrastructure as a service (IaaS) and platform as a service (PaaS) instances.

About Providence

Providence (external link) is a healthcare organization of 120,000 caregivers, 52 hospitals, 1,085 clinics and a range of health and social services present in seven US states: Alaska, California, Montana, New Mexico, Oregon, Texas and Washington. Providence also pursues innovations to make its services more convenient and affordable for all, continuing its 100-year tradition of serving the poor and vulnerable.

Solution component

- IBM® Turbonomic® Application Resource Management

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