Cognizant

Case Study: Healthcare

How a global healthcare player lowered costs by 76%

Running applications in a traditional data center is hardly the best way to save money, as one leading firm was only too aware.

The company, which supplies healthcare products, technologies and therapies across more than 100 countries, wasn't able to scale its applications and had not only availability issues but also high infrastructure and license costs—even using virtual machines in its data centers.

The scalability issues hampered the company's capability to respond to peaks in customer transactions. Meanwhile, network and data center shortcomings were curtailing application availability.

The company was forced to solve these problems in 2018, when the company's data center provider announced the closure of managed facilities in Europe. It had just six months to find an alternative. Migrating to the cloud was the obvious solution. And we were the perfect partner for the job.

At a glance

Hosting applications in a virtualized data center environment proved challenging to a global healthcare provider which were earlier running in on-premises servers. We migrated the company's applications to containers and instances in the Amazon Web Services (AWS) cloud. Now, the company saves money and has a much nimbler IT setup.

Outcomes

▪ Saved $220,000 a year on IBM WebSphere Application Server and Red Hat Enterprise Linux operating system licenses.

▪ Sped up cloud migration to a rate of 13 containers and three applications per week.

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Containers are the key

Cognizant already had a deep relationship with the company, having worked on numerous projects since 2012. This made us an obvious choice to help move the company's applications from the existing IBM data center environment to the Amazon Web Services (AWS) Cloud, migrating approximately 125 applications to run on Amazon Elastic Compute Cloud. This project wasn't just about cloud migration, though. To maximize the benefit to our client, it was also important for us to create a platform that would enable its software developers to move the company's applications easily and at will on their own.

The platform had to be easy to use, even for developers with minimal knowledge of cloud infrastructure. We embarked on the project in 2019. One of the key features of the migration was hosting applications on the cloud in containers, which are logical packaging mechanisms that allow each application to run independently of its environment.

We built a fully automated deployment platform that enables developers to easily move applications to an Amazon Elastic Container Service. This highly scalable and fast container management service makes it simple to run, stop and manage Open Liberty containers on a cluster. Open Liberty is an open source version of IBM WebSphere, which the company was using previously for application hosting. Using the platform has cut the company's infrastructure costs by more than 60%.

We also created a platform to automate updates relating to new project releases or changes in the Amazon Machine Images used in AWS. This allowed the company to dispense with a dedicated software team and cut operational costs by 50%.

Numerous advantages

We completed the migration of applications from the company's European data centers to the AWS cloud within six months. The results were so striking

▌ Cut infrastructure total cost of ownership by 62%.

▌ Migrated more than 100 applications to containers in six months, with good practice compliance.

▌ Migrated 70-plus applications to AWS infrastructure, with good practice compliance.

▌ Reduced operational costs by 50%.

▌ Achieved overall savings of 76%.

that the company chose us to migrate more than 100 U.S. workloads to the AWS cloud, as well.

Now, the company benefits from a self-service migration platform that enables developers to migrate and maintain the application in the cloud with:

▌ A loosely coupled architecture that has fully automated pipeline cycles triggered by particular application requirements, with each cycle being independent of others.

▌ A publish-subscribe model that categorizes containers for easy targeting with updates, a process that improves scalability and flexibility.

▌ Serverless computing that easily scales the platform infrastructure up and down as required.

▌ A user-friendly, cloud-agnostic interface that helps developers migrate applications without being dependent on the cloud center of excellence team.

In essence, the company enjoys fully automated deployment operations without any operational burden. The cloud onboarding process for applications is quick and easy. And having a generic, serverless platform helps optimize migration and operational expenses.

About Cognizant Healthcare Business Unit

Cognizant's Healthcare Business Unit works with healthcare organizations to provide collaborative, innovative solutions that address the industry's most pressing IT and business challenges—from rethinking new business models, to optimizing operations and enabling technology innovation. A global leader in healthcare, our industry-specific services and solutions support leading payers, providers and pharmacy benefit managers worldwide. For more information, visit www.cognizant.com/healthcare.

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Cognizant Digital Systems & Technology works with clients to simplify, modernize and secure IT infrastructure and applications, unlocking the power trapped in their technology environments. We help clients create and evolve systems that meet the needs of the modern enterprise by delivering industry-leading standards of performance, cost savings and flexibility. To learn more, contact us at simplify@cognizant.com or visit www.cognizant.com/cognizant-digital-systems-technology.

About Cognizant

Cognizant (Nasdaq-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 194 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us @Cognizant.

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