boxboat
an IBM Company

CASE STUDY

How an E-Commerce Company Improved Reliability and Cycle Time with Microservices

Project: Rebuilding a monolithic application into microservices using .NET Core

The featured client is a crafting products company that relies both on direct website sales as well as independent consultants to connect with customers, hold crafting parties and showcase the company's products.

SUMMARY

- 30 .NET Core Apps
- Azure Kubernetes Service
- 2 Preview Environments
- Azure DevOps
- 3 Production Regions

The company's web applications ran on a monolith that was difficult to update and used an older version of .NET, forcing them to run Windows on premises. With the monolith, it was extremely difficult to update individual portions of the website, making it impossible to respond to business needs quickly. Since working with BoxBoat, the company has moved from an inflexible, waterfall-style development process that impeded innovation to an agile deployment process that is updated several times a day. Now developers are able to work independently and ship new features as soon as they're ready. In addition, the site is substantially more reliable, the engineering team doesn't worry that deployments will break something and the team has quickly upskilled on containers and Kubernetes best practices.

Leveraging external expertise

Deconstructing their monolith involved creating 30 microservices. Each microservice also needed its own deployment pipeline, and needed to

be run through the dev and staging environments and run through complete testing before being deployed to production. Though the crafting company has an internal DevOps team, they were looking for expertise that would help set up the environments correctly, build the CI/CD pipeline and help the team identify any reusable components between pipelines for the different services.

> *We're able to iterate on features quickly and ship into production several times per day. Our application's reliability is better, and because we have a dev and staging environment combined with robust automated testing we're highly confident that an update we ship to production will work as expected. This makes it easier for us to react to changes in the marketplace or in our customers' needs, making us more agile and better able to use software to meet our business goals.*

The internal DevOps team members also weren't Kubernetes experts, and didn't want to learn through trial and error. By working with BoxBoat, the team was able to learn best practices as they were building the new microservices, without worrying that a mistake could have serious consequences, either immediately or in the future.

Increased agility and reliability

Working with BoxBoat allowed the DevOps team to move to a microservice-based architecture, built on containers and Kubernetes, in a matter of months instead of years. The team was able to upskill faster, and avoided Kubernetes architecture, configuration, and CI/CD automation pitfalls that can be common during DevOps transformations. As a result, the company's application is much more agile, and it's much easier for the team to make changes to individual parts. The containerized application is also much more reliable than the old monolith, which helps improve the overall customer experience.

---

boxboat
an IBM Company

BOXBOAT TECHNOLOGIES
info@ boxboat.com
www.boxboat.com

BoxBoat was founded to help innovative organizations achieve Digital Transformation through the adoption of cloud native technologies. We are engineers at heart, and enjoy solving challenging problems by utilizing cutting-edge solutions including Docker and Kubernetes. ***Deliver software faster with BoxBoat!***