HOW WE ACCIDENTALLY HELPED SOTAR.AI AVOID A CORONAVIRUS CRISIS

Because of the global coronavirus pandemic, between February and April of this year (2020), Sotar.ai saw a 250% increase in its workload, yet despite the massive increase, with no changes at all, the company's Azure environment performed exceptionally well, and business was growing.

This was made possible through an unrelated, but much-needed, upgrade project we performed together.

Sotar.ai offers holistic, white-label eCommerce solutions, which give grocery retailers the tools to build and manage their own branded website, with built-in marketing, customer service, order fulfillment, automated warehouses, and delivery features.

Sotar.ai wanted to modernize their application infrastructure and move from Azure App Service to Azure Kubernetes Services (AKS). They aimed to gain better control over their application infrastructure while allowing more flexible and reliable scaling, to enable business continuity and growth.

From a restricted manual monolith to a fully-mature, flexible, controlled, automated Microservice Architecture

When Sotar.ai approached us, their customer application environment was a monolith Azure App Service with limited control, managed SQL and Azure function, and no CI\CD. As good as App Service was bringing Self Point to where they were, it couldn't allow a much-needed application warmup whenever the underlying hosts were undergoing maintenance, rebooting, or replacement. In addition, code changes were deployed manually to the App Service.

For example, if the app was not warmed up yet due to underlying hosts restarting, users would get a substandard experience. To solve these application performance issues, we worked with the Self Point team to revolutionize their application environment with AKS. Some of the features utilized for the upgrade were liveness & readiness Kubernetes probes.

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We also made the transition to microservices and created the ability to split single customers from the rest of the production. "Heavy lifting" processes were separated with an Ingress, enabling better response times for the main portal, enabled constant version upgrades, 0 downtime and much more.

Introducing Azure DevOps and building the CI\CD lifecycle was groundbreaking for Self Point. We enabled faster time-to-market with automation for their new microservice architecture, including templated Helm charts with simple parameters, to allow new service deployments and Ingress for any customer just by adding a line with the customer's name on the Helm chart.

Microservice Architecture

Some key benefits from the AKS deployment: The onboarding process of new customers was cut in half, and the new process allows releasing new features up to twice as fast as in the past. In addition, maintenance costs were reduced by 40%, and the SLA grew to 99.5%.

Our help also had a much-welcomed side-effect: During the start of the coronavirus pandemic (February-April, 2020), the company saw a massive increase in activity, as workloads grew by 250%. However, the shift to AKS has increased the efficiency to such that at the peak, the infrastructure scaled 10X seamlessly.

Sotar.ai was extremely impressed with the growth and new standards they have embraced by using Azure DevOps and AKS. These improvements made them more stable and ready to mature further by developing their QA and hiring a QA expert who built automation tests on Azure DevOps.

"For a startup like ours, we want to move fast, close the gaps with our customers, and provide as much feature functionality as we can. AKS lets us manage our platform environment in both an agile and safe manner"—Gilad Globen, CTO & VP R&D, Sotar.ai.