

Schier Products: Disrupting Traditional Manufacturing with Modern Software

Schier is a privately owned manufacturer of grease interceptors for commercial kitchens, based in Shawnee, KS. In the last 20 years, they have grown from a small regional company to the most widely specified brand of grease interceptors in the United States. Schier is disrupting traditional blue-collar manufacturing with modern technology with its [Grease Monkey application](#).

“We like to think of ourselves as a little bit forward-thinking, especially for a blue-collar manufacturing company. We get compliments all the time about some of the stuff that we’re doing.”

- Doug Niccum, Software Engineering Manager, Schier

MATCHING GREASE MONKEY’S EVOLVING COMPLEXITY WITH OPTIMIZED SOLUTIONS

Grease Monkey started as an online calculator for sizing grease interceptors. A simple, single-page web application where users could answer a few questions, and the application would recommend the right product for their use case. This quickly evolved into an e-commerce site.

Today, Grease Monkey is a custom-built application using the Stacks CMS on top of the Laravel Vapor PHP application layer, interfacing with BigCommerce’s headless API for shipping, inventory, and pricing for order fulfillment. It’s now a comprehensive system, processing thousands of interactions per minute, across thousands of different concurrent users. The application now requires consistent feature development, maintenance, and end-user technical support.

As the application grew, so did its complexity. The team was running the application in AWS Lambda to simplify operations, yet were constantly running into memory limits and deployment bottlenecks. This led Doug Niccum, Software Engineering Manager at Schier, to look for solutions. He found CTO.ai through a simple Google Search, scheduled a call, and was on his way.

CTO.ai recommended a phased approach, starting with containerizing and running the applications in Docker and AWS Fargate before transitioning to DigitalOcean Kubernetes. As a certified partner of AWS, GCP, and DigitalOcean, they were able to recommend the best cloud provider for Schier, optimizing costs and performance.

“CTO.ai built a tailor-made DigitalOcean-managed Kubernetes infrastructure that fit our business and our needs. They provided us with the tools, knowledge, and priority support to begin managing our own cloud-native applications, allowing us to push more code, with better accuracy and negligible downtime.”

- Doug Niccum, Software Engineering Manager, Schier

One of the key achievements was the development and integration of a product API, creating a unified source of truth for Schier’s product catalog and delivering live product information through a REST interface complete with product specifications, dimensions, and ratings that might be assigned to it by a governing body. Since introducing the product API, e-commerce sales doubled in the first year.

CTO.AI’S SEAMLESS INTEGRATION, ROBUST SECURITY, AND COLLABORATIVE PARTNERSHIP ELEVATE SCHIER’S OPERATIONAL EFFICIENCY

CTO.ai’s integration with Slack revolutionized Schier’s DevOps processes, empowering non-technical team members and improving overall efficiency. The fact that you can run DevOps functions within a chat client that people are familiar with has enabled non-technical team members to become self-sufficient. One example that Schier found valuable was creating a simple command for clearing website cache using Slack.

Security concerns were met with CTO.ai’s encrypted secrets manager, elevating Schier’s security posture, and keeping their secrets and configuration variables safe and secure. Adopting these practices has made Schier better, which in turn provides a better product for their customers.

CTO.ai’s approach goes beyond a typical vendor-client relationship; it’s a true collaboration. Real-time support, tailored solutions, and hands-on services to manage the DevOps tools and cloud infrastructure differentiate CTO.ai, providing Schier with a strategic partner for sustained success.

What sets CTO.ai apart is not just its features but its unparalleled support and expertise. With Doug being the sole developer with cloud-native architecture and cloud infrastructure knowledge, the quick response to support tickets and hands-on support for integrating with services like DigitalOcean made a significant impact.

Now, Schier deploys software updates multiple times a day into a fully managed DigitalOcean Kubernetes cloud infrastructure.

“Our builds are consistently completing now with accuracy and reliability, they are finishing in 4-5 minutes. That is 66-75% faster than they used to be.”

- Doug Niccum, Software Engineering Manager, Schier

CONCLUSION

Looking ahead, Schier envisions a dynamic future with a three-year roadmap. Multiple applications leveraging the API layer are in development, promising continuous innovation and adaptability. There are also plans to prepare the information architecture to leverage AI in the next 12 months.

The success story of Schier and CTO.ai stands as a testament to the transformative potential of strategic partnerships in navigating the complexities of modern software development and infrastructure management. This collaboration positions Schier for sustained success in an ever-evolving digital era.

[Watch the interview with Doug Niccum, Software Engineering Manager at Schier](#)