



Case Study

Automation and Emulation Software Leader Streamlines Development Processes With Cprime's Expert-Led GitLab Solutions and DevOps Services

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Company Details

Industry: Supply Chain Automation, Material Handling, Warehouse Management, Logistics, Software & IT, and Consulting Services.

Company Size: 6,000+ FTEs

Location: United States (Atlanta, GA), Germany, United Kingdom, Mexico, Australia, Belgium, China, Italy, Spain, France, Lithuania, and Czechia

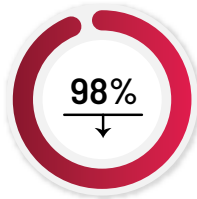
Products: Automated Warehouse and Supply Chain Management Systems

Cprime Services: [Expert-Led GitLab Solutions and DevOps Services](#)

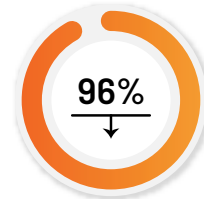
Executive Summary

An international warehouse automation specialist partners with Cprime and GitLab to streamline development processes, reduce proposal calculation times, and increase its capacity to rapidly handle customer requests. Cprime's DevOps specialists deployed a GitLab solution that slashed turnaround times to just 2% of the baseline.

Key Stats



Decrease in overall
time to solution



Decrease in proposal
submission time

The Client

In an era of online shopping and next-day delivery, this US-based Cprime client facilitates business continuity for thousands of brands worldwide. Their complex automated storage, retrieval, warehousing, and logistics solutions improve the flow of goods, materials, and information, allowing companies to meet the ever-growing expectations of global consumers.

Industry expertise, robotics, artificial intelligence, and machine learning have made the company a global leader in materials handling and logistics. Its diverse clientele come from industries that include ecommerce, retail, food and beverage, manufacturing, and third-party logistics providers.

The Challenge: Streamlining Modern Warehouse Design Pipelines to Enhance Pre-Sales Efficiency

Designing a modern automated warehousing solution is astonishingly complex. In an unoptimized environment, the sheer number of factors and volume of calculations required to create a design prototype for a new logistics facility can take weeks.

“A modern warehouse is essentially a collection of robots. It’s all spectacularly complicated,” explains Kevin Ryan, Cprime Head of DevOps, EMEA. “The scope, size, and throughput of modern warehouses, and the number of unique products in any given warehouse have grown beyond our human ability to calculate. Even machines struggle to crunch the numbers efficiently.”

While lengthy design calculation times were the company’s primary pain point, system complexity also resulted in an inability to react rapidly to change. Any updates to a customer’s operating parameters or facility specification would further delay pre-sales project modeling; the company had to recalculate each time-consuming potential design from scratch. The delays ranged from hours to weeks.

"If customers can't get answers from us quickly, the dialogue stalls and the entire process can grind to a halt. We wanted to change that," says one of the project's executive sponsors.

"They were seeing new projects and revenues delayed by up to a quarter as they waited for a mathematical model. There was a potential cost of millions for each delay," says Ryan. "The company needed a development framework that would allow them to put a pre-sales mathematical model of a warehouse in front of a customer faster, which meant boosting efficiency."

To complicate matters, any development framework the company adopted had to be a good fit with Azure Batch, the cloud platform providing the computing power to manage the calculations. The company also needed an implementation partner that could work closely with the cloud specialists on-site to modernize, scale, and streamline its infrastructure to meet the growing demand of the world's largest retailers and manufacturers.

The Solution: Leveraging the GitLab Toolchain with Cprime Expert DevOps Services

Evaluating its options, the automated warehouse designer selected GitLab to provide the backbone for its new continuous integration and continuous development (CI/CD) initiative. Recognized for being robust, reliable, and secure, GitLab was the ideal CI/CD, collaboration, issue tracking, quality automation analysis, and code review tool. The GitLab toolchain contained everything the company needed to speed up development and enhance their predictive modeling sales tools and in-production logistics engines.

To implement the solution, GitLab recommended the [Expert-Led GitLab Solutions and DevOps Services](#) of Cprime, their Certified Training Partner.



“The Cprime DevOps team has invested heavily in GitLab professional services engineer certifications covering everything from CI/CD, project management, DevOps, and inner sourcing, to security and system admin,” explains Ryan. “But the requirements for this engagement went beyond professional GitLab implementation services. The company hired Cprime to show them how to take the GitLab toolchain and achieve elite DevOps CI/CD performance.”

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— Kevin Ryan, Cprime

Head of DevOps, EMEA

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Discovering Context and Objectives Using Spikes

The two-person Cprime team began Discovery to define the company’s context and objectives clearly. They started by creating research tasks to identify and resolve questions and explore potential solutions.

“By creating technical spikes, we formed an understanding of their codebase and what they needed to achieve,” says Ryan. “Using those prototypes, we rapidly gathered feedback and verified we were on the right track.”

Tailoring Toolsets and Processes for the Azure Environment

After achieving consensus with the company’s management and DevOps teams, the Cprime team tailored the new GitLab instance to work specifically within the customer’s Microsoft Azure environment and security context.

"We created secure containers, CI/CD pipelines, and process templates," says Ryan. "The result was a universal base implementation they could reuse across multiple projects to speed up development long term."

Infrastructure as Code With Helm and Terraform

To ensure a consistent, easily deployed development environment, the Cprime team also worked with the company to leverage GitLab CI/CD's native Terraform integration. Using the Terraform Helm provider allowed the company to begin centrally deploying Helm charts. This allowed it to manage high- and low-level Azure Kubernetes components, easily implement and modify Infrastructure-as-Code (IaC) workflows, and simplify the creation of common and complex infrastructure patterns.

Throughout the process, Cprime worked to bridge the gaps, coordinating and driving innovation between company stakeholders, DevOps teams, and third-party Azure infrastructure architects.

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— Kevin Ryan, Cprime
Head of DevOps, EMEA

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The Results: Increased Deployment Frequency and Reduced Error Rates

Because of the combined efforts of Cprime and the project teams, the warehouse design company established high levels of process maturity based on DevOps Research and Assessment (DORA) core metrics. Across the board, the company's deployment frequency increased while it slashed its change lead times, change failure rates, and mean error recovery times.

Cumulative Change Dramatically Reduces Turnaround Times

As an indicator of the efficacy of the cumulative changes, the company reduced simulation times from over 11 hours to as few as 24 minutes. Turnarounds on proposal submissions showed similarly dramatic improvements.

"We've reduced the time to solution—from receiving customer data to running designs and calculations and ultimately giving out a warehouse proposal—from eight weeks down to one day," the executive sponsor states. "The productivity increase has scaled our capacity to answer RFQs and engage with new and existing customers."

Likewise, by using GitLab project templates, Terraform, and Helm scripts to automate their CI/CD pipeline, the company's development team recently set a new turnaround record—they received a new specification and deployed the corrected warehouse design in only 90 minutes.

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Getting There With Cprime

During the engagement, Cprime exceeded the client's expectations for GitLab professional engineering services. Based on Cprime's performance and the clear successes of phase one, the company has extended the relationship indefinitely.

"We started with a very short engagement and, based on our performance, over a year later we support all their GitLab and Azure-related activities," says Ryan. "The company learned what I want all potential Cprime customers to understand: if you want to become a high-performing, elite development organization, Cprime will get you there."

If you'd like to see similar results in your own organization, explore our [flexible GitLab and DevOps solutions](#).

Visit us at cprime.com

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Featured Team Members



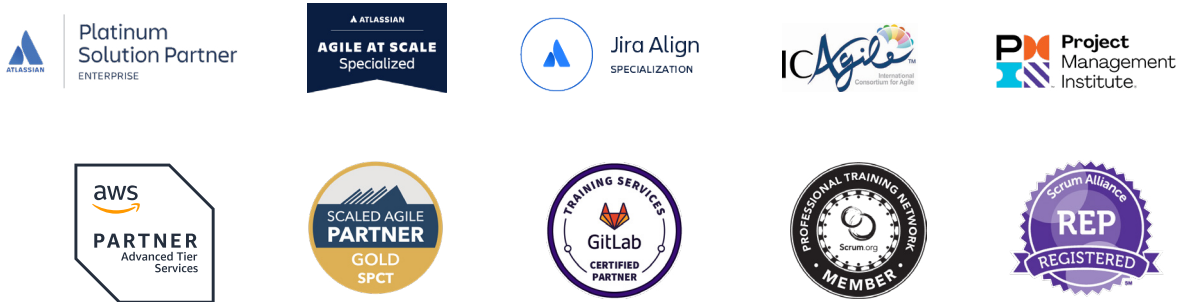
Kevin Ryan

Agile and DevOps Coach for Cprime EMEA

Beginning as a software engineer over two decades ago when what we now call Agile was in its infancy, Kevin's career and professional experience expanded into Agile consultancy, Coaching, Digital Product Development, and Management Consultancy. He now works with companies to support their transition to Agile and DevOps from team to enterprise scale.

Cprime Partnerships

With over 30 partners, Cprime is committed to growing mutually beneficial alliances to deliver more value across all of Cprime's Trainings, Products, and Services. [View All Partners](#)



About Cprime



Cprime is a full-service global consulting leader in enterprise and product agility, software tooling, and managed services. Cprime's team of experienced practitioners help businesses achieve agility, improve visibility and alignment, speed time to market, and realize significant operational and cost saving improvements.

With over 20 years' experience, Cprime is trusted around the globe to provide strategic and technical consulting, coaching, and training to businesses leading their industry in digital transformation.

Cprime is a Goldman Sachs Asset Management and Everstone Capital Partners portfolio company.

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