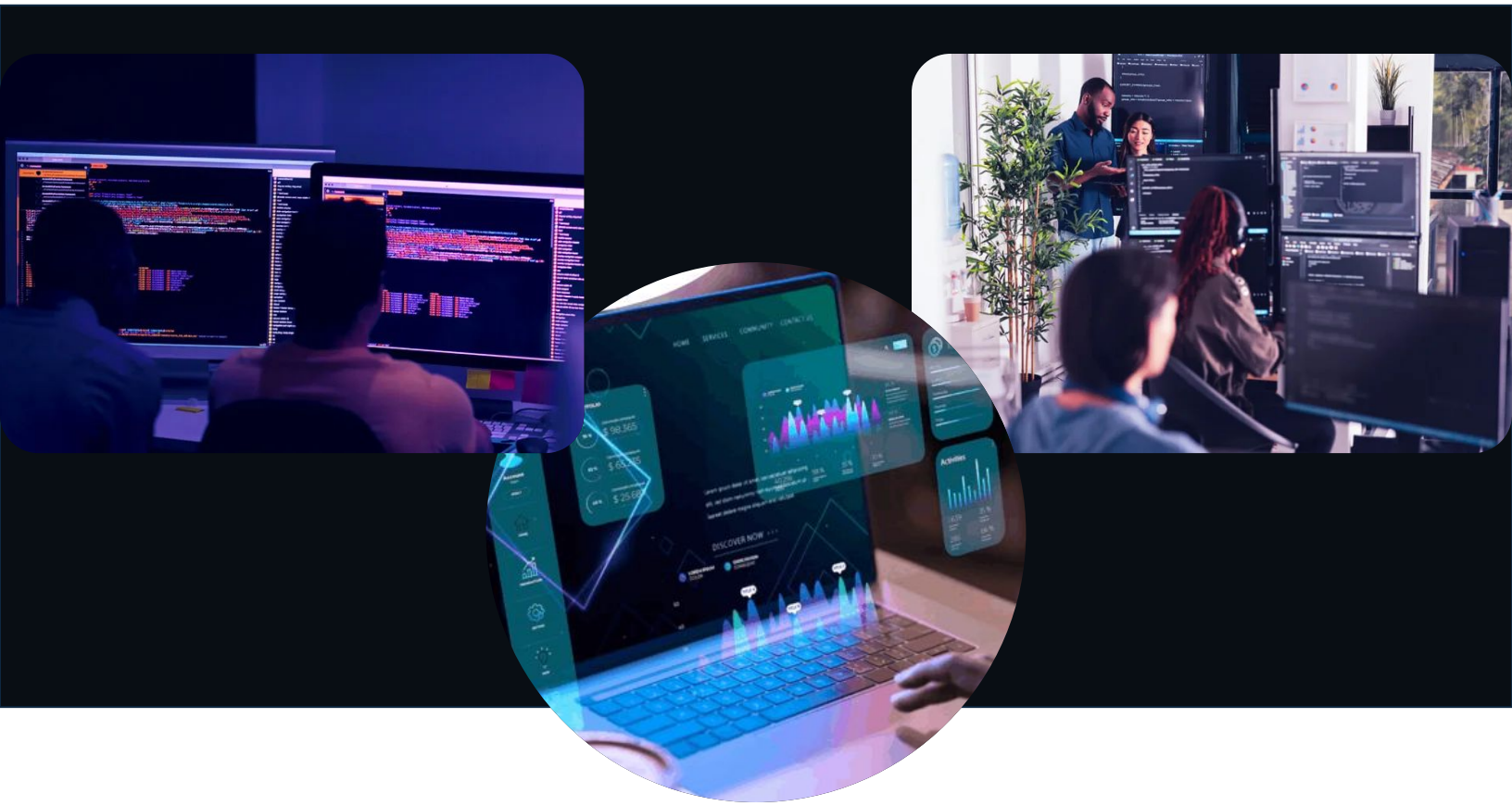
CodeRoad



Marketplace & delivery acceleration

CI/CD Modernization, Platform Stability & Revenue Enablement

Presented by: CodeRoad | January, 2026

Executive Summary

A leading automobile auction platform connecting buyers and sellers in the used vehicle market, partnered with CodeRoad to address delivery bottlenecks that were slowing feature development, increasing operational risk, and limiting the platform's ability to scale. Supporting both online and physical auctions at enterprise scale requires rapid innovation alongside continuous reliability.

CodeRoad helped expand engineering capacity while modernizing delivery pipelines to increase automation, reduce deployment friction, and improve quality at scale. By evolving the CI/CD strategy from AWS CodePipeline and CodeBuild to GitHub Actions, the team enabled parallel development, faster validation, and more predictable deployments. The result was a measurable reduction in production defects, significantly faster deployments, improved system stability, and the ability to unlock delayed revenue through critical platform enhancements.

About the Project

The companyy operates one of the world's largest used-vehicle marketplaces, supporting buyers and sellers through digital and physical auctions, inventory management, valuation tools, and financing services. The platform processes high volumes of inventory data and transactions, making delivery speed, system reliability, and operational resilience essential to customer trust and business performance.

As part of their automotive ecosystem, they continuously evolves its technology stack to support growing demand, new revenue streams, and increased security requirements across its services.

Looking for Capacity and Reliability

As platform demand increased, Our client faced two interconnected challenges: limited engineering capacity to support both new enhancements and existing systems, and insufficient automation in delivery pipelines. Deployments were time-consuming, testing cycles were constrained, and production defects created operational overhead.

The organization needed a delivery model that would allow multiple teams to work in parallel, validate changes earlier, and deploy more efficiently—without introducing additional risk to mission-critical services.

Our Velocity Playbook in Action

CodeRoad embedded with this company's teams to accelerate delivery while strengthening platform reliability through automation and DevOps modernization.

1. **CI/CD Modernization**
   - Implemented automated pipelines using AWS CodePipeline and CodeBuild
   - Migrated CI/CD workflows to GitHub Actions to improve flexibility and scalability
   - Enabled parallel execution of builds, tests, and deployments

2. **Automated Testing & Validation**
   - Integrated unit testing and component testing directly into CI/CD pipelines
   - Reduced reliance on manual testing through earlier, automated validation
   - Improved confidence in releases before production deployment

3. **Scalable Delivery Enablement**
   - Removed deployment bottlenecks to support multiple teams working in parallel
   - Reduced long, overnight deployments in favor of faster, controlled releases
   - Improved overall development flow and delivery predictability

Shipping Fast, Building Right

Fewer Production Defects

Early validation lowered defect rates in production environments.

Parallel Team Execution

Multiple teams can now deliver features simultaneously with fewer bottlenecks.

Sustainable Velocity

Delivery speed continues to improve year over year.

Faster Deployments

Automated pipelines significantly reduced deployment time and effort.

Improved Platform Stability

Critical alerts were dramatically reduced across services.

Trusted Delivery Partner

CodeRoad operates as an extension of the internal team.

A Velocity Roadmap for Long Term Growth.

CI/CD automation became a foundational enabler for our client's delivery transformation. By evolving from legacy pipeline configurations to GitHub Actions, the platform gained greater flexibility, faster feedback cycles, and improved support for parallel development. Automated builds and tests now run consistently across teams, ensuring higher-quality releases without slowing innovation.

The introduction of unit and component testing within pipelines shifted validation earlier in the lifecycle, reducing manual testing effort and preventing defects from reaching production. Deployments that once required long, high-risk windows were streamlined into efficient, repeatable processes that improved reliability and reduced operational strain.

As the system scaled, these automated delivery practices allowed more teams to work concurrently across features, inventory services, and billing systems. The result is a delivery engine capable of supporting continuous growth while maintaining the stability expected of a mission-critical automotive marketplace.

Technology in action

GitHub Actions

for automated CI/CD pipelines enabling parallel builds, tests, and deployments

AWS CodePipeline

for initial pipeline orchestration and build automation prior to migration

Monitoring & Alerts

for reducing critical alerts and improving platform stability.

Parallel Test Execution

for faster feedback cycles and reduced deployment time

Talent + Acceleration + Confidence

Platform Stability

- Critical alerts reduced from ~2,000 to 100 across services
- Significant decrease in production defects

Delivery Efficiency

- Deployment times reduced, eliminating long overnight releases
- Faster testing cycles through automated validation

Security & Reliability

- Legacy vulnerabilities addressed
- Stronger overall system security posture

Engineered Momentum

CodeRoad's Business Impact by the numbers

$36M in annual revenue unlocked by modernizing billing and storage—turning monthly leakage into profit.

98% infrastructure efficiency. A Cloud SQL cost reduction through architectural rightsizing and smart data tiering

3X deployment velocity by replacing manual gates with fully automated CI/CD pipelines.

How CodeRoad can help you accelerate

CodeRoad delivers Velocity-as-a-Service (VaaS) by modernizing delivery pipelines to eliminate enterprise-scale bottlenecks. We partnered with you to evolve their CI/CD strategy to GitHub Actions, enabling parallel team execution and tripling deployment velocity through fully automated pipelines. By integrating earlier validation and addressing legacy vulnerabilities, we reduced critical alerts by 95% while unlocking $36M in annual revenue. CodeRoad's systems are engineered to turn complex auction environments into high-stability, revenue-generating engines.

Strategic Technology Solutions

- Cloud modernization & rightsizing
- GCP, AWS, Azure engineering
- Infrastructure as Code & automation
- Kubernetes & container orchestration
- Observability & cost intelligence
- FinOps governance frameworks
- Data engineering & integrations

The business impact of VaaS

Learn how velocity-as-a-service (VaaS) redefines outcome-based execution and engineers momentum for the future of technology. Get the latest on:

- Engineered Momentum
- Coordination Tax
- Outcome-Based Delivery
- Nearshore Transformation
- Roadmap Acceleration
- Predictable Scaling
- Predictable ROI

Your testing should move as fast as your roadmap.

Book Assessment Call

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