# Automation and Devops

**INDUSTRY:**
Healthcare

**TIMELINE:**
3+ years

**proem**
Behavioral Health

Proem empowers healthcare professionals, educators, and researchers with software solutions that allow them to more accurately and efficiently identify, diagnose, and monitor individuals who need behavioral health assistance. Their behavioral health technology stems from evidence-based solutions, validated through more than 17,000 studies and used worldwide.

## CLIENT CHALLENGES

- Technical debt from an outdated user interface, leading to poor user experience
- Slow response times and application lags, which left doctors waiting for an accurate diagnosis and treatment process
- Lengthy manual test cycles and defect leakage
- The need to transfer their platform to the cloud while maintaining strict data regulations for over 25 years worth of patient and provider data

## SOLUTION IDENTIFIED

To meet growing demand, Proem needed a comprehensive solution package that included:

- **Performance Tuning**
- **Automation**
- **DevOps**
- **Platform Architecture**
- **EHR Integration**

## SUCCESS STATISTICS

**80%**
increase in release speed

**86%**
decrease in deployment time

**56%**
increase in automation test coverage

## KMS IMPACT

### Performance Tuning
KMS Healthcare reduced response times from 10 seconds to 2 seconds, set up a maintenance process for defragmentation and tuning, and assessed and implemented recommended improvements and tools for Proem's database design and configuration.

### Automation
We introduced and utilized Katalon Studio to build a new test automation solution and provided guides on Confluence. Not only did our team increase the automation coverage of front-end, API, and smoke testing, but we also built out performance monitoring dashboards, along with reports and metrics, to increase transparency across Proem.

### DevOps
We completed the setup of a CI/CD pipeline process on AWS alongside automated tests with triggers within 2 weeks, all while reducing the deployment time from 85 to roughly 12 hours for 6 production environments.

### Platform Architecture
The KMS team shifted components and re-architectured from a monolithic platform to a microservices architecture, aiding growth and future integrations with larger EHR providers.

### EHR Integration
We designed, developed, and tested a SMART on FHIR user-facing application while integrating it within the existing athenahealth provider portal to enable healthcare professionals to identify, diagnose, and monitor individuals more timely and accurately.

## CONCLUSION

**Initially, the limited capacity of Proem's old platform hindered further growth and profitability. But their partnership with KMS Healthcare has resulted in critical improvements and provided them with an innovative edge to stand out and strengthen their relationships with healthcare organizations.**