

A 200x Performance Increase: Engineering Reliability for Luster.ai

In the competitive landscape of B2B sales, the difference between success and failure often comes down to practice. Luster.ai recognized this need and created a platform that provides sales teams with a realistic and dynamic sales simulation environment. Built on a microservices architecture, Luster.ai integrates its API with multiple other services to offer a stress-free practice ground for sales professionals. However, ensuring the reliability and performance of such a complex system is no small feat. The Engineered Innovation Group (EIG) stepped in, leveraging their expertise in Site Reliability Engineering (SRE) to elevate Luster.ai's platform to new heights.

As Responsive & Reliable As A Human Conversation



Luster.ai's platform needed to be highly reliable and performant to simulate real-world sales scenarios effectively. Any downtime or performance issues could disrupt the user experience and undermine the platform's credibility. The challenge was to ensure seamless integration of various services while maintaining optimal performance and reliability. The complexity of a microservices architecture necessitated a sophisticated approach to monitoring, automation, and incident response.

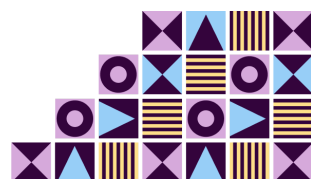
Luster.ai leverages a robust technology stack to provide a seamless, dynamic simulation environment for sales practice. The platform combines a responsive user interface, efficient backend processing, and advanced AI capabilities. This allows users to practice their sales approach without the risk of upsetting or losing real customers. Secure user authentication and single sign-on are ensured, while container orchestration and load-balancing technologies enhance scalability, availability, and performance. This architecture enables Luster.ai to deliver a reliable, high-performance experience, ensuring users can practice sales techniques without disruption.

The Three-Legged Stool SRE Strategy

EIG implemented and maintains a comprehensive SRE strategy for Luster.ai, focusing on three key areas: monitoring and observability, automation, and incident management.



- 1. Monitoring and Observability:** EIG set up advanced monitoring systems to gain real-time insights into the platform's performance. They utilized tools like Amazon CloudWatch for monitoring and AWS CloudTrail to streamline auditing. This setup allows Luster.ai to set parameters for acceptable performance at a granular level. The system maintains a high



level of observability across the platform and functions as an engine for custom alerts. Any deviation from acceptable performance triggers an alert delivered via email and Slack, ensuring both the Luster team and the EIG team can quickly address customer-facing issues.

Additionally, the EIG team built dashboards that enable the Luster team to proactively monitor the application's performance. This transparency offers valuable insights to the Luster leadership and product teams, helping them understand product usage and prioritize engineering efforts. By optimizing the user experience and ensuring high performance, Luster.ai continues to provide a reliable and dynamic sales simulation environment for sales professionals.

- 2. Automation:** EIG implemented automation into deployment and scaling procedures to boost efficiency and minimize human error. This automation not only saves time but also ensures consistency in the deployment process. By using Amazon's Elastic Container Service, they have streamlined the deployment pipeline and made it more reliable. Additionally, automating the scaling of the cluster allows for quick response to fluctuating traffic demands. With the orchestration of all Docker containers taken care of, the application can run smoothly without manual intervention.

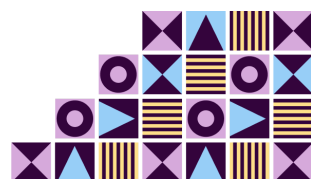
EIG also implemented infrastructure as Code (IaC) to make the long term management easier

- 3. Incident Management:** EIG established a robust incident management framework to handle any disruptions swiftly and effectively. They developed clear protocols for incident detection, escalation, and resolution, minimizing downtime and maintaining service reliability. This approach included regular incident response drills and post-incident reviews to continuously improve the process.

The Proof is in the Performance

The collaboration between Luster.ai and EIG resulted in a highly reliable and performant platform that exceeded expectations. Key outcomes included:

- **Improved Uptime:** Migrating to the new platform eliminated ongoing issues with the manual deployment process, positively impacting product uptime and reducing support requests.
- **Enhanced Performance:** The application has seen a 200X performance increase, providing a smoother and more realistic call experience for Luster's users.



- **Scalability:** The migration allowed for scalability, auto-scaling, and CI/CD implementation. This automation streamlines the release process, ensuring seamless code deployment without manual intervention.

Testimonial



Christina Brady, CEO & Co-Founder of Luster.ai, shared her experience working with EIG:

"Partnering with EIG was a game-changer for us. Their expertise in site reliability engineering transformed our platform, making it more reliable and efficient. The improvements in uptime and performance were immediately noticeable, and it has given us the confidence to scale our operations and serve more users effectively."

A Pivotal Partnership

The Engineered Innovation Group's SRE services played a pivotal role in enhancing Luster.ai's platform, ensuring it could meet the demands of its users with reliability and performance. This case study underscores the importance of a robust SRE strategy in maintaining the integrity of complex, microservices-based applications. By partnering with EIG, Luster.ai not only improved its technical infrastructure but also positioned itself for future growth and success.

For more insights on how The Engineered Innovation Group can help your business, visit engineeredinnovationgroup.com

About The Engineered Innovation Group (EIG)



EIG designs, builds, and engineers innovative B2B SaaS products for entrepreneurs, enterprises, and educational institutions. We aim to help companies create products and build their software organizations from insights to impact. We specialize in making the complex simple.

About Luster.ai



At Luster, we believe in perfecting practice to achieve sales brilliance. In a landscape where go-to-market teams struggle to learn effectively, we offer a solution driven by the power of generative AI and technology. With Luster, we deliver Predictive Enablement™, ensuring that training sticks and sales goals are consistently met.

