

IndoKargo is one of the biggest companies in Indonesia working in the logistics sector. IndoKargo uses locationbased tracking, enabling customers and fleet owners to track their goods in motion.

Digital supply chain transformation for retailers, distributors and brands.

Engagement Overview

Crownstack helped Indokargo in its complete digital transformation. Crownstack built their customer-facing e-commerce platform for web and mobile, reducing the time to bring products to market. In addition to this, we made internal inventory management tools to get inventory online. Crownstack also helped in transforming distribution by streamlining its transportation and logistics needs.

About the Customer

Indokargo is a key FMCG distributor in the Indonesian market, selling products of different prominent brands through its sellers and distributors. Indokargo sells more than 30+ product categories, including Beverages, diaries, healthcare, hospitality, personal care, pet foods, stables and household products. Indokargo retails 100% authentic



products from well-known brands such as Coca-Cola, Nestle, etc.

In addition to retail, Indokargo also manages the distribution of products through its fleet and drivers. In terms of network, Indokargo covers three countries, Indonesia, Malaysia and Singapore, with a network covering more than 30,000+ customer touchpoints. In its distribution network, Indokargo has more than 400 vehicles and around 500+ drivers.

Industry	Transportation, Logistics, Supply Chain and Storage	
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Business Challenges

Indokargo was running most of its business operations offline with essential tools like spreadsheets, although some ERP tools were in place but needed to be used to their full potential. The challenges business faced were the following:

- There is no real-time tracking of orders, invoices and distributions.
- Difficulties in converting orders into delivery jobs as both e-commerce and logistics were handled by different teams, and they needed to be on the same page.



- Time and money losses in delivery due to inefficiency and lack of accountability for fleets and drivers.
- Industry: eCommerce & Logistics
- Connect with us |
- Difficulty in tracking large volumes of orders from various stores.
- Tracking assets like cold storage unit kiosks was cumbersome and tedious due to maintenance needs and relocation.

Business Solution

Indokargo engaged Crownstack to bring the system online to process sales orders, better product outreach, increase delivery efficiency and cut costs due to inefficient systems and untracked loopholes. Here is what we did with Indokargo:

- Infrastructure control and provisioning per the industry standards and protocols significantly reduced deployment time and increased deployment frequency.
- Leveraged Docker and Amazon Elastic Kubernetes Service (EKS) to build highly scalable and available environments that leverage spot instances and auto-scaling to scale with any change in website traffic dynamically
- Audited existing infrastructure against AWS best practices with the below implementations:
 - Configuration management tool
 - Infrastructure as code
 - CI/CD pipelines
 - Security automation

Technical Excellence

- Infrastructure provisioned and managed in multiple AWS accounts using EKS
- Reduced time to onboard new services via Jenkins, Terraform,
- Implemented highly scalable Kafka and ELK stack for centralised logging and analysis
- Implemented TIG stack (Telegraf, Influx, and Grafana) for infrastructure and business metrics monitoring and NewRelic for applications performance monitoring
- Implemented AWS Security best practices using Trusted Advisor, Guard Duty, Secret Manager, Security Hub, and Inspector

AWS Services Used

- Amazon VPC to launch AWS resources in a virtual network
- Amazon Elastic Container Service for quickly managing the containers
- Amazon RDS to set up, operate, and scale a relational database
- Amazon S3 and Amazon Glacier for online file storage and data archiving
- Amazon ElastiCache (Redis) to deploy, operate, and scale an in-memory data store or cache in the cloud
- Amazon Simple Notification Service (SNS) to coordinate and manage the delivery or sending of messages to subscribing endpoints or clients



- Amazon Simple Email Service (SES) to increase the effectiveness of email marketing on the cloud
- Amazon Application Load Balancer (ALB) to ensure content-based routing
- Amazon Route 53, a scalable domain name system (DNS) service, to direct endusers to applications
- Amazon Elastic Block Store (EBS) to store persistent data
- AWS Identity and Access Management (IAM) for securely controlling access to AWS services
- Amazon CloudWatch collects information, track metrics and monitor infrastructure on AWS Cloud constantly
- Amazon CloudFront for caching static and dynamic content for different platforms

Technology Stack

Frontend	Angular
Backend	Laravel, PHP
Mobility	Android
Workflow	JIRA, Github, Designs
Database	My SQL
WebServer	Apache
Server OS	Linux
Hosting	Digital Ocean

Business Outcome

- Provided 24/7 monitoring and stringent SLAs to ensure 99.99% availability
- Improved time to market by automating inventory management for new product additions.
- Implemented one-click rollback and deployment with zero downtime
- Provided the necessary support during significant sales on the online store, where the brand has done almost 20x the daily business in one day
- Every man on the ground has a smartphone device to keep track of everything which is going on in business thereby enabling real-time dashboards

Further Links

Learn More About Crownstack's Offerings Learn More about Indokargo

