

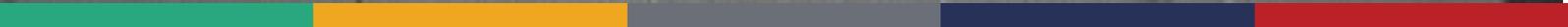


ZIGRON

Connected Application Expert

إيغرون

Smart Life Solutions IoT Platform





Smart Lifestyle Platform- A Case Study

Introduction

lylus became a provider of smart living solutions for homes, offices, and businesses. It now offers advanced sensors and devices with a 24x7 live Integrated **Monitoring Centre** and **Rapid Response** to meet increasing security demands.

Challenge

lylus brought their ideas to us as a startup. The company wanted to provide leading security features in their security system product to meet the needs of a wider target market from homeowners to offices. Our prior expertise with Abode (case study below) assured them of our expertise and we were further tasked with creating an e-commerce platform that allowed technological improvements every day to take their product to the next level. lylus realized the importance of DevOps for any business and added it as a critical requirement to their project.

Project goals:

- Mobile and Web application
- Home security features
- Cloud enablement
- Process agility
- Technology Stack

Solution

Abode's success with our services, excited lylus to explore the possibilities of a complete IoT and Cloud ecosystem within their home security products. We became their exclusive partner for the seamless ideation, deployment, and optimization of a high-tech security system perfect for homes, apartments, corporate offices, retail, and more. Our experts conducted extensive discussions with lylus to conceptualize their requirements for the product.

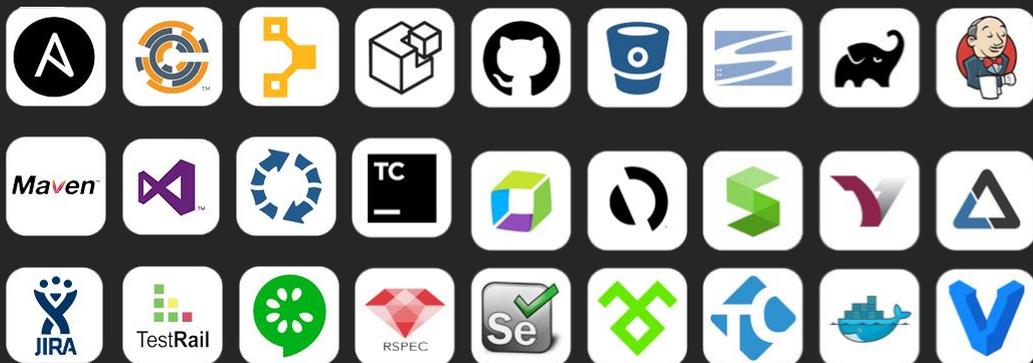
After carefully evaluating the project, we presented them a proposal that presented details regarding feature-packed application development, cloud adoption, and DevOps. After successfully acquiring the project we planned, designed, and implemented the entire infrastructure.

Technology Stack

Backend: NodeJS, PHP

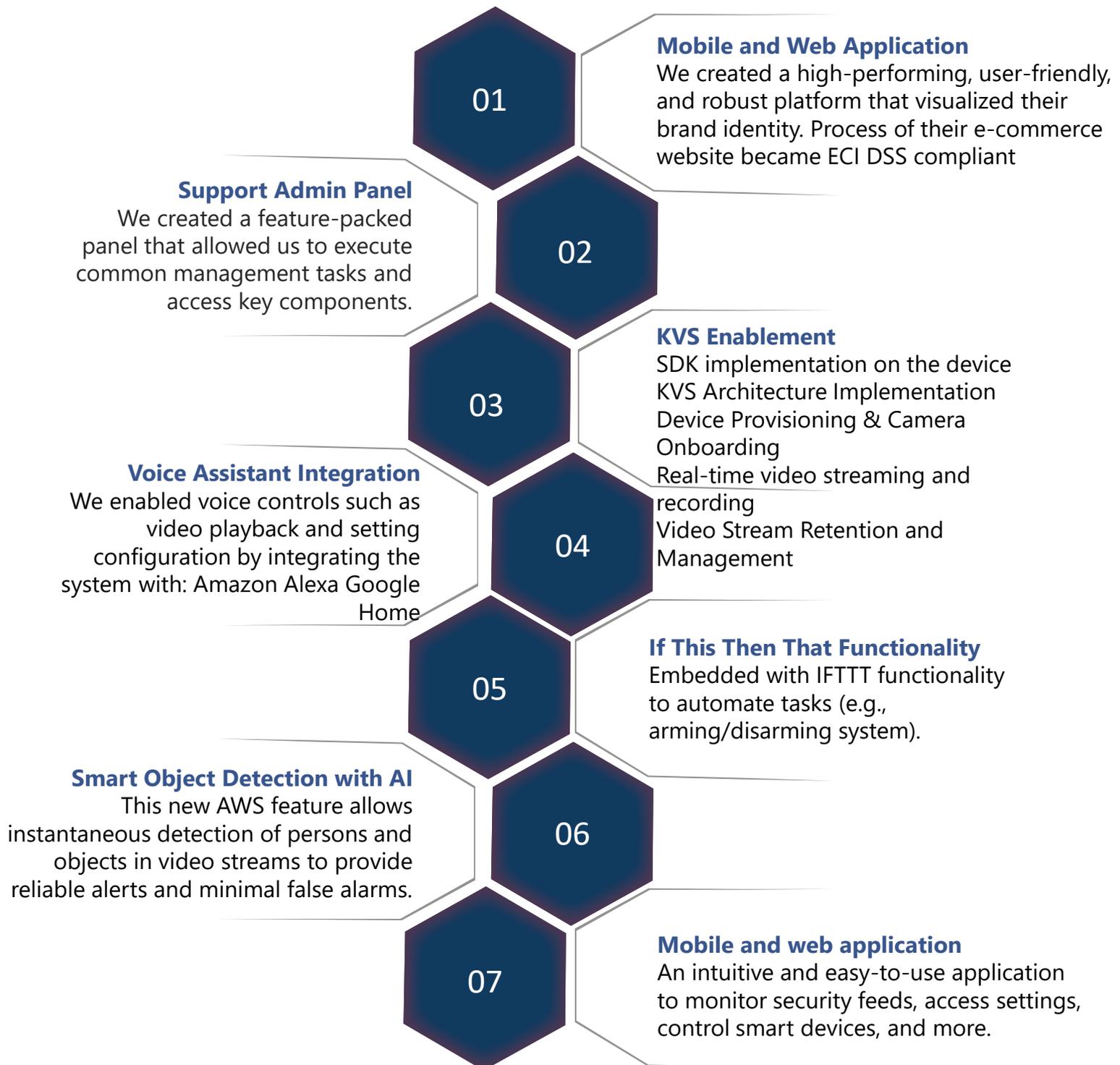
WebApp: AngularJS

DevOps: Terraform, Jenkins



Platform Development

Our developers implemented agile development processes and sophisticated technology stacks to develop Iylus's application. With our services, we enabled seamless user experiences with expert design and development.



AWS Cloud

Due to our domain expertise working with Abode, we offered lylus cloud consultancy to highlight the benefits of creating their system on the cloud. With the right mix of deployment models, tools, and a platform, we developed a cloud adoption strategy. a strategic plan to transit lylus on the public cloud. This helped them attain reliable performance and cost-efficiency.

Our cloud professional teams provided point-to-point security, expansive storage, monitoring and alerting, and failover strategy. This was followed by integrating DevOps with the cloud to shorten the development lifecycle and faster time-to-market for their new features.

After successfully building their cloud environment in 2 months our teams managed and monitored their system to ensure its optimal performance. But apart from simply building the cloud, we ensured its strategic advantage was aligned with their business objectives by:

- Accelerating the delivery of new features
- Delivering resource transparency
- Enabling faster resource provisioning
- Embedding security to prevent data breaches

lylus DevOps Enablement

To match the pace of development, our DevOps teams implemented top-tier tools and technologies to build, test, and deploy processes effectively and make continuous integration and delivery possible.

Continuous Integration and Continuous Delivery (CI &CD)

Our DevOps team addressed the challenges in 3 phases:

DevOps Assessment

Our DevOps consultant interacted with the lylus team to analyse their existing software development processes, infrastructure, testing, and project management tools to identify bottlenecks in DevOps adoption. With this, we were able to create an action plan to mitigate identified bottlenecks and implement a DevOps culture.

Automation Process

We set up and configured the necessary tools to automate every process of their software development lifecycle. This included source control and continuously integrating, testing, delivering. Our teams helped lylus's team adopt a DevOps culture with best practices. This ensured quick response to customer needs with low-risk releases.

DevOps Management

To the present day, we've continuously monitored the efficiency of the introduced workflows, infrastructure changes, process adaptation, and more. Based on reports and tools, we fine-tuned the workflow and processes to improve the performance of the DevOps ecosystem

DevSecOps

We offered security services along with DevOps to make the production environment secure so software builds are released frequently. Our teams continuously scanned the production environment for any security threats and continuously monitored with vulnerability management so lylus's applications ran securely.

Infrastructure Provisioning

To enable quick Infrastructure provisioning Terraform was used. Its various features allowed adding the infrastructure as code to ensure consistency and automation. With Terraform we were able to bring:

- Visibility into changes before they happened
- Graphing to visualize the infrastructure
- Understand resource relationships
- Organize configurations into smaller chunks for re-use, and maintenance
- Orchestration, and not just configuration
- Immutable infrastructure
- Declarative code
- Client-only architecture

Our infrastructure provisioning with an advanced tool delivered several benefits:

- Automation for on-demand deployments
- Reliability with minimal manual error
- Documentation to understand how things were working
- Version control through commit logs to allow debugging
- Code validation with code reviews and automated tests
- Improved productivity by allowed code re-use
- Deploying code and managing infrastructure manually is repetitive and tedious. IAC enabled computers to do what they do best (automation) and developers to do what they do best (coding).

Containerization

We encapsulated their application in a container with exclusive operating systems and related services necessary to run the application. Its stateless design facilitated DevOps by ensuring consistency in different environments and agility in switching between them.

Our Kubernetes consulting services helped lylus tackle components across the platform (AWS) with high scalability, performance, and speed. Our experts deployed, maintained, and managed container-oriented workloads to overcome practical challenges.

Additionally, we managed Kubernetes operations such as continuous monitoring, optimization, and upgrades. By assessing the potential for cloud readiness, we deployed a cloud-native application on Kubernetes seamlessly.

Benefits

- Optimized security
- Rapid time to market
- Enhance productivity
- Saved time and money
- Recovery time, RPO reduced, and downtime minimized to zero
- The agile environment became very strong



GET IN TOUCH



sales@zigron.com



US Corporate headquarters:
3100 Clarendon Blvd. Suite
200, Arlington, VA 22201

Pittsburgh office:
3013 Seneca Ct, Cheswick,
PA 15024, USA



+1 703 536 8351

