Mobile Application and Marketing Platform Re-Architecture
for Global Consumer Enterprise

CANDID
P A R T N E R S

The Candid Partners team re-architected key areas of the platform of our client's touch screen beverage dispensing system to improve its reliability and to allow our client to quickly deploy high profile, large volume campaigns with zero downtime.

BACKGROUND

Our client's beverage dispensing system offers an innovating touch screen experience that allows people to choose from 100+ still and sparkling beverage brands. Within our client's company, the machine's popularity and potential initiated several new marketing activities globally. Innovative promotions were being developed for consumers through digital campaigns and were targeted to consumers through a mobile app for iOS and Android devices. However, the beverage device technology team was finding that meeting these new marketing demands posed challenges to the platform architecture and technology ecosystem.

THE PROBLEM

The team was unable to reliably deploy releases for the mobile application and back-end supporting system. The platform was overly complex and comprised of eight separate sub-applications. Support costs were high, there was no rollback capability, the infrastructure was not scalable and lacked redundancy. Additionally, the infrastructure was manually deployed and some application components relied on hard coded configurations that could not easily be redeployed for testing purposes or simulating Disaster Recovery.

THE CANDID PARTNERS SOLUTION

The Candid Partners team conducted a technical assessment that revealed the need to re-architect key areas of the company's beverage dispensing machine infrastructure supporting the mobile app. The Candid Partners team therefore proposed a phased approach to rebuild all Infrastructure using standardized CloudFormation and bootstrap scripts to improve the reliability of deployments and enable effective Disaster Recovery. Furthermore, the approach allowed us to re-architect the application and rebuild the entire infrastructure with almost no downtime for our client.

ACTION

The Candid Partners team implemented the following technology improvements:

- *Stabilized the foundational platform, decoupled application components to be stateless to improve redundancy and fault tolerance through a Multi-AZ approach*

- *Implemented a blue-green deployment approach to minimize downtime and enable rapid rollback*

- *Standardized releases using AWS CodeDeploy and Jenkins*

- *Re-designed the hosting environment to enable auto-scaling and improve scalability and cost efficiency*

OUTCOME

The automation and the gradual deployment approach enabled re-architecting the platform and rebuilding the infrastructure with virtually no downtime. The streamlined architecture and automated build and deploy pipeline has reduced costs for new application development by approximately 30%.

RESULTS

Candid Partners applied AWS best practices to demonstrate that the DevOps practice works with the right team and blend of skills.

- *Develop a cloud-first architecture and strategy*

- *Create infrastructure as code for a reproducible environment*

- *Automate through auto-scaling to reduce costs*

AWS SERVICES USED

- *Amazon EC2*
- *Amazon ELB*
- *Amazon ElastiCache*
- *Amazon Auto Scaling group (ASG)*
- *Amazon Route53*
- *AWS CodeDeploy*
- *Amazon RDS*
- *Amazon S3*
- *Amazon CloudWatch*
- *Amazon CloudFront*
- *AWS CloudFormation*

THIRD PARTY APPLICATIONS USED

- *Jenkins*
- *Pingdom®*
- *Janrain®*

Deployed Lady Antebellum Drink Mix Campaign

Deployed Star Wars Drink Mix Campaign

100x Increase in Adoption and Enagement

Real-time Consumption Data Exchange

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Contact Candid Partners to find out how we can put advice into action for you.

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