

FULCRUM FD DIGITAL

Fintech Company Reduced Cost of Ownership with Fulcrum's Cloud Solutions

Fulcrum Digital helped this UK-based APM (alternative payment method) company move to AWS services from legacy systems effortlessly – read how

SUMMARY

A UK-based APM company provides Payments-as-a-Service platform combining acquirers, gateways, shopping carts, and Alternative Payment Methods (APM) into a single integration. A single integration with this platform facilitates merchants to have the flexibility to build a perfect global payments system.



By rendering the disaster recovery environment redundant, and shutting down resources when not required, this company reduces the total cost of ownership for the platform.

By balancing resources, Fulcrum Digital boosted the performance and scalability of the platform by designing resources to scale and meet demands as required.

The company could proactively monitor the environment, both for potential bottlenecks or problems, and to analyze and optimize performance. This led to reduced costs through right-sizing of provisioned resources.

The replacement of fixed virtual machines with flexible EC2 instances dramatically improved the durability of the application. Hardware or software failures no longer need to be thoroughly investigated and fixed to restore.

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OUR STORY

The company backed by a legacy system found it difficult to cope up in scaling to meet existing demands. It wanted to improve the following factors: cost-efficiency, reliable uptime, consumption-based billing, auto-scalability, 24x7 enterprise support.

In order to service customers, they needed better visibility and control over the infrastructure, as well as infrastructure maintenance and patch management. Along with the production environment, seven other environments were required by this company – Development, Continuous Integration, Quality Assurance, User Acceptance Testing, Demo, Sandbox and Non-Functional testing.

SERVICES PROVIDED

Here's how Fulcrum Digital zeroed in on Amazon Web Services (AWS): AWS was evaluated basis the following factors: built-in security features, managed and automated nature of its services, and ease of use. AWS's Payment Card Industry Data Security Standard (PCI DSS) compliance was deciding factor in finalizing the AWS cloud since the customer has to comply with the same norms.

Fulcrum Digital worked with this company to design, configure, setup and migrate all existing infrastructure to AWS.

Several of Amazon Web Services were used to improve the platform:

- Elastic Compute Cloud (EC2)
- Relational Database Service (RDS)
- Virtual Private Cloud (VPC)
- Lambda

- Amazon Simple Storage Service (S3)
- CloudWatch
- CloudTrail
- CloudHSM

- Elastic Load Balancer (ELB)
- AutoScaling
- Amazon Simple Notification Service (SNS)
- Identity and Access Management (IAM)

A conceptual diagram depicting how AWS services were leveraged:



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Along with these, we also implemented ELK-based Log Monitoring System, WAZUH and Suricata-based intrusion Detection System (IDS), on-premise LDAP and VPN servers with Multi-Factor Authentication (MFA).

Here's what was achieved through the aforementioned services:

- Compliance
- Infrastructure Flexibility
- Responsiveness of resources
- Seamless support to variations in traffic
- New instances triggered in response to unhealthy instances
- Efficient workload distribution and autoscaling
- Network security strengthened by using Virtual Private Cloud (VPC)

RESULT

Fulcrum Digital solutions helped the fintech company bring down the costs dramatically by:

Powering off resources when not in use

- Removing the need for a cold disaster recovery environment
- Reducing the base instance size to meet the average demand
- Scaling the infrastructure automatically to meet peak demand
- Replacing fixed infrastructure in a single data center with flexible infrastructure split across multiple availability zones
- Storing database and instance backups in the cloud
- Enabling faster restore
- Re-architecting the application to take advantage of all AWS has to offer
- Replacing the fixed web and application tier servers with a scalable pool of EC2 instances
- Enabling faster turn-around and leveraging the platform capabilities to allow infrastructure to 'self-heal.'

You may have a great idea, waiting to be industrialized! You are sure your idea holds potential but are worried about how you will take it to market, quickly and successfully. Fulcrum Digital's Managed Innovation can help make that experience smooth and methodical with transparency on the entire process. To know how Fulcrum Digital Business can work for you, please visit

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