

PROJECT OVERVIEW

A mid-sized e-commerce company migrated to the cloud without adhering to the six pillars of the Well-Architected Framework, leading to security breaches, performance inefficiencies, and cost overruns. A Well-Architected Review identified critical gaps in Security, Performance Efficiency, and Cost Optimization. ASB's team transformed the environment into a Secure, Scalable, & Cost-effective solution. This not only resolved vulnerabilities but also restored customer trust & positioned the organization for long-term success.



CHALLENGES

Security Vulnerabilities



- No IAM policies or encryption.
- Exposed S3 bucket led to a data breach.
- Lack of monitoring and logging.

Performance Inefficiencies



- Over-provisioned resources caused high latency.
- No auto-scaling or load balancing.
- Poor user experience during peak traffic.

Costing Overruns



- Underutilized EC2 instances running 24/7.
- No cost visibility or budgeting tools.
- Optimized resource usage.

Operation Risks



- No disaster recovery or backup strategy.
- Lack of centralized configuration management.
- Non-compliant with industry standards.

WHY AWS

WELL-ARCHITECTED FRAMEWORK



Security



Reliability



Performance
Efficiency



Cost
Optimization



Operational
Excellence



Sustainability



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WHY USE IT



Manage Cost



Manage Risk



Manage Performance

DESIGN PRINCIPLES



Stop guessing the capacity needs



Assess systems at production scale



Automate with architectural experimentation in mind



Consider evolutionary architectures



Drive architectures using data



Improve through regular drills

OUR SOLUTION

Our solution transformed the customer's cloud environment into a secure, high-performing, and cost-optimized architecture using the AWS Well-Architected Framework as follows.

Well-Architected Review (WAR):

Thorough assessment across the Six pillars of the AWS Well-Architected Framework. Identified High-Risk Issues (HRIs) and prioritized them based on business impact.

Security Remediation:

Implemented robust IAM policies with least privilege access and enable encryption for data. Deployed advanced threat detection and monitoring tools to identify and respond to security incidents in real-time.

Performance Optimization:

Introduced auto-scaling and load balancing to handle traffic spikes. Optimized database and application performance using caching.

Cost Optimization:

Resized underutilized resources and automated scheduling of non-critical resources. Leveraged AWS Savings Plans and reserved instances to reduce costs. Provided visibility into cost drivers using budgeting and monitoring tools.

Operational Excellence:

Set up centralized monitoring and logging for proactive issue detection and resolution. Implemented automated backup and Disaster Recovery strategies for business continuity.

Scalability & Future-Readiness:

Designed a scalable architecture to support business growth and innovation. Provided training and documentation to empower the customer's team to manage the environment effectively.

AWS SERVICES



Cost Optimization



AWS Budgets



AWS Cost Explorer



Savings Plans



AWS Compute Optimizer



AWS Trusted Advisor



Performance Efficiency



Amazon EC2 Auto Scaling



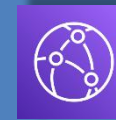
Elastic Load Balancing



Amazon Route 53



Amazon ElastiCache



Amazon CloudFront



Reliability



Amazon CloudWatch



AWS Backup



AWS Site-to-Site VPN



AWS CloudTrail



AWS Systems Manager



Security



AWS Security Hub



Amazon GuardDuty



AWS Identity and Access Management



Amazon Inspector



AWS WAF



Operational Excellence



AWS Support



AWS Organizations



AWS Config



AWS Well-Architected Tool



AWS Personal Health Dashboard

and several more services...

NEED TO BE WELL-ARCHITECTED? - SCHEDULE A CALL WITH ONE OF OUR EXPERTS TODAY!

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