Vertical Relevance on AWS

Ensure Business Continuity and Resiliency for Core Financial Services Applications

Resiliency is Critical to Reduce Risk

The Financial Services industry is one of the most critical and heavily regulated industries, requiring resilient applications to serve businesses and consumers across the globe. These applications require architecture that can support high volume, low latency applications with strong requirements regarding uptime and data retention. Migrating to the cloud to mitigate the risk of downtime and data loss makes sense given the industry best practices regarding High Availability and Disaster Recover solutions for modern architecture. Failing to implement these controls in a Financial Services application – such as trade ordering processing, payment processing or trade supervision reporting – can result in the loss of millions of dollars, regulatory scrutiny and injunctions, and massive impact to brand. Ensuring that all failure types are accounted for and understanding how the architecture and application respond to a variety of failures is challenging, due to the unexpected causes that can occur.

Perform a Resiliency Workflow

To achieve assurance about resiliency of applications and overall workflow, Vertical Relevance's Resiliency offering conducts comprehensive architecture reviews and testing. Architecture reviews become essential in understanding the logical and physical aspects of a workflow in identifying areas of risk. These reviews are used to make recommendations, prioritized by impact to the Financial Service's business and likelihood of failure, and drive key inputs within the Vertical Relevance Resilience Testing Framework. We draw from our library of 400+ test scenarios and test cases, which we implement and customize to the required workflow. This is coupled with an automated testing framework completely written as code, which is installed and customized to verify the appropriate NFRs are met. Finally, the comprehensive set of test cases are executed and analyzed to identify any high severity issues (scenarios where the NFRs cannot be met). Reusable Solution Accelerators have been implemented to reduce improve the velocity and quality to perform a resiliency workflow for Financial Services organizations.

Mitigate Risk & Improve Operational Efficiency of Financial Platforms

Identify risks to your system from failure, improving the response on the system and reducing the impact of failure.

Gain Confidence Finding Unknown Risks

Running comprehensive failure tests uncovers many unknown responses to a system that can be remediated, allowing for increased confidence in the system's ability to deal with failure.

Reducing the risk of failure

Avoid impact to the company brand and regulatory infractions through comprehensive testing at all levels of an application.

Accelerate Restoration of Critical Services

Financial Services have high volume / low latency workflows that require minimal downtime. Some failures responses can be automated while others require manual intervention. Resiliency testing improves observability to ensure the correct, speedy response.

Improve Operational Efficiency

The continuous improvement of a workflow from identifying failures to a system decreases the complexity and time needed from operations. Combining resiliency testing with game day testing can lead to much higher operational efficiency.

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AWS provides scalable, resilient and secure services that enable customers to build efficient solutions to meet their market needs. Vertical Relevance brings significant Financial Services and AWS technology experience to evaluate current and targeted capabilities against business goals and identify solution architectures and management processes to achieve those business goals. We partner with our customers to evaluate, prioritize and execute on programs to evolve their existing applications into cloud native solutions that are secure, reliable, perform efficiently and are optimized for cost, while managed using best practices.

Features

Resilient Architecture

We identify your Non-Functional Requirements (NFRs), especially those that deal with resiliency (RTO and RPO). We then evaluate your current logical and physical architectures to identify areas of concern in meeting those NFRs such as single points of failure, dependencies, and network concerns.

FMEA Framework

Failure Mode Effect and Analysis (FMEA) is a framework used to identify test scenarios and creating all the test cases required for thoroughly testing the Reliability of a system. We leverage our library of test scenarios and test cases that be leveraged for Financial Service's cloud applications and components.

Automated Resiliency Testing Framework

An automated Resiliency framework designed to be a serverless, cloud native solution with a library of automated test cases can be leveraged to quickly customize test cases to a given workload.

How a leading worldwide payments company is ensuring resiliency with its mission critical applications

Create a Resilient Architecture

Customer needed to re-architect their mainframe to a microservices architecture running in the cloud, while ensuring that their NFRs could still be met. We conducted extensive architecture reviews and explored if it allowed for the appropriate reliability.

Define and Automate a Testing Strategy

As the architecture was being built, we created an extensive FMEA testing framework that included 400+ scenarios, along with an automated resiliency testing framework.

Execute Resiliency Testing to Certify workloads

Test cases were executed, and results were analyzed to identify any findings for expected and unexpected outcomes. Once issues are remediated, tests were re-run to certify that the workload was resilient to the identified failures.

Get started with Vertical Relevance solutions on AWS

If you are looking to provide automation, consistency, predictability, and visibility to your software release process contact us today.