

Revolutionizing Observability:

# Centralized Log Collection & AI-Driven Insights



## CASE STUDY



### About Client

A leading government organization



### Industry

Information



### Service

Data & Analytics



## Business **Need**

The client, a prominent government organization, sought a dedicated solution to automate the collection of logs from a wide array of sources within their infrastructure, including servers, virtual machines, containers, networks, middleware, applications, and databases. The objective was to centralize this data for comprehensive analysis. Additionally, the client aimed to implement

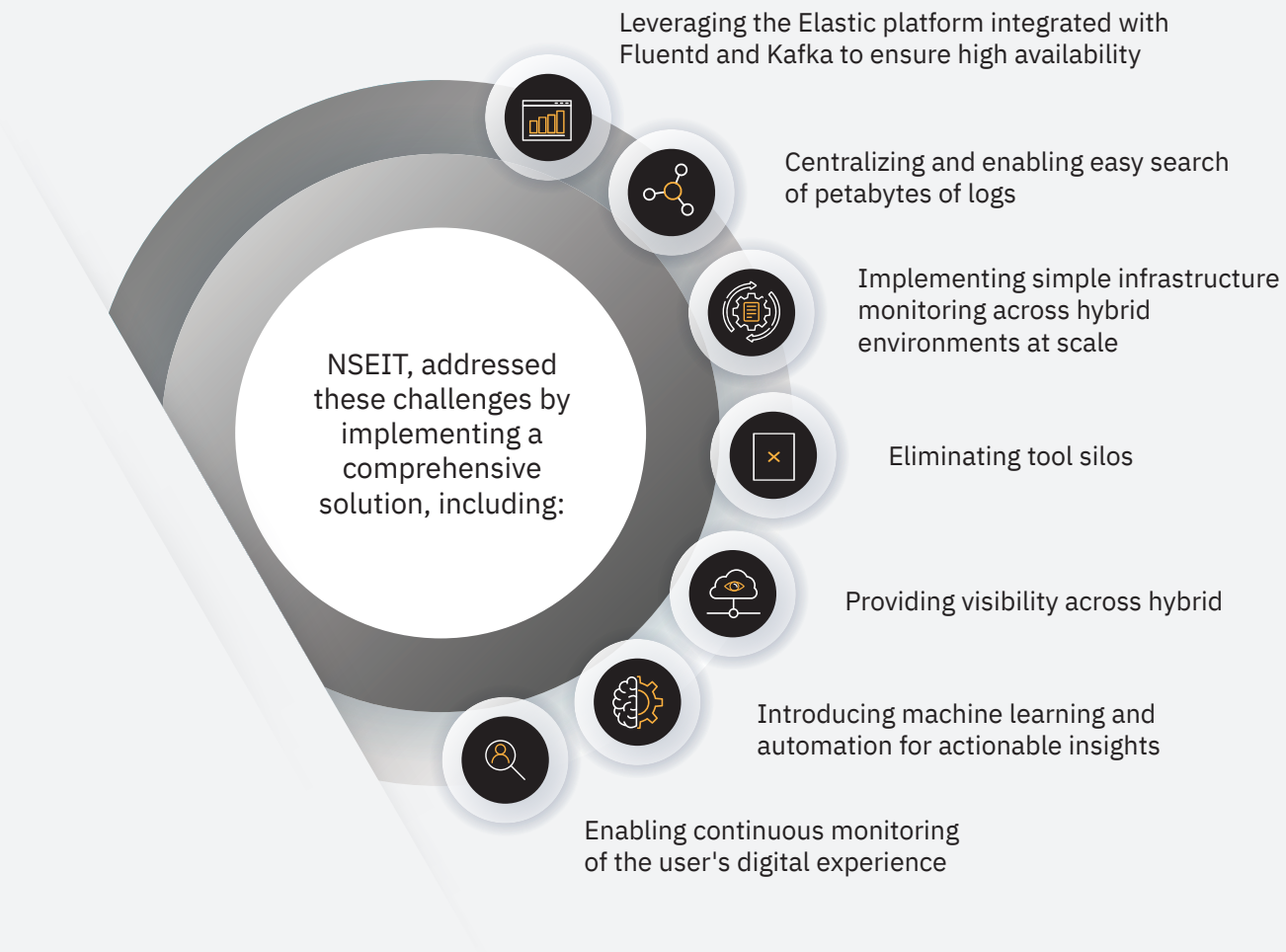
cutting-edge AI and ML tools to autonomously learn data patterns and proactively detect issues across their entire infrastructure in real-time. They required robust visualization tools to identify data patterns within logs and a dashboard for the isolation and analysis of error, debug, and audit logs.

## Business **Challenge**

Prior to the implementation of the solution, the client encountered several challenges. The use of various dashboards from multiple monitoring tools was time-consuming and inefficient. The daily influx of data was significant, leading to delays in issue identification due to the need to correlate monitoring data points, including events and logs.

Distinguishing false alarms from different systems posed a challenge. Managing complex alerting and triggering predefined actions with third-party integrations added complexity. Moreover, there was a pressing need to integrate monitoring tools with the ticketing system for seamless issue resolution.

# Business **Solution**



## Project **Differentiator**

The solution provided by NSEIT offered several differentiators, including:

- ▶ Ensuring maximum uptime
- ▶ Instantaneous generation of essential data reports
- ▶ In-depth examination of performance limitations
- ▶ Utilizing machine learning for automatic data pattern recognition

## Tech **Stack**

- ▶ Elasticsearch
- ▶ Kibana
- ▶ Beats
- ▶ Logstash

# Business Impact

The project delivered significant benefits, including:

High availability  
multiple cluster  
environment with  
automatic failover



Live capacity reporting  
and forecasts for all  
associated  
infrastructure



Leveraging machine  
learning for real-time  
data pattern  
recognition



Integration of 400+  
unique device  
/application logs  
with customized  
parsers



Detailed analytics  
for identifying  
performance  
bottlenecks at any  
component level

## About NSEIT

NSEIT Limited is a digital native technology company that engineers world-class solutions to help our global customers accelerate their digital transformation journeys. Our key service pillars are Application Modernization, Business Transformation, Data Analytics, Infrastructure &

Cloud Services, and Cybersecurity, through which we create intuitive digital experiences and tangible business impact. For over two decades, our innate drive for excellence has made us the partner of choice for global organizations. At NSEIT, we fuel digital progress.

For more information, visit us at [nseit.com](https://nseit.com)

Follow us at:



© NSEIT Limited. All rights reserved.

All trademarks, logos, and brand names are the property of their respective owners. All company, product, and service names used are for identification purposes only. Use of these names, trademarks and brands does not imply endorsement.