Case Study

Full-Stack Monitoring for a Leading South-East Asian Bank

eG Innovations

A leading privately-owned bank in South-East Asia chose eG Innovations to modernize its IT operations, eliminate outages, and transition from reactive firefighting to proactive, insight-driven service assurance. The result: a 66% reduction in alerts, significantly faster root-cause analysis, and a unified monitoring platform supporting its cloud-first transformation.

The Bank at a Glance

5.2M+	500+	$15B	30 Years
Customers Served	Branch Network	Total Assets	Operating History

The bank delivers a wide portfolio of financial services, including retail and corporate banking, digital payments, and mobile banking, supported by an increasingly complex hybrid IT landscape.

The IT Environment

The IT team at the bank is managed by the Chief Technology Officer (CTO) and comprises of 40 members. The team is responsible for maintaining all banking operations across approximately 400 servers, mainly on-site, which run a wide variety of operating systems and applications.

The bank faced significant challenges within its IT environment which has a complex web of multi-tier dependencies. This complexity made it difficult to pinpoint the root cause of performance issues and even more challenging to resolve them quickly.

IT Environment Details

- **Operating Systems:** Solaris, Linux, and Microsoft Windows in a mixed on-prem environment.
- **Application Stack:** Java applications on Oracle WebLogic and Microsoft IIS.
- **Databases:** Oracle, Microsoft SQL Server, and MySQL, all of which are business-critical.
- **Event Streaming:** Apache Kafka for real-time data pipelines.
- **Core Banking Platform:** Oracle FLEXCUBE, the heartbeat of every transaction.
- **Server Scale:** Large servers with up to 64 CPUs, 256 GB RAM each, and as many as 80 application instances running on a single machine.
- **Existing Monitoring:** A fragmented toolset with Nagios for servers, vCenter for VMware, Cisco admin tools for network equipment, and Elastic for syslogs, and with no unified view.

Core Challenges

Fragmented Visibility Across a Complex IT Environment

The bank operated a large, heterogeneous IT estate spanning 400 on-premises servers across Solaris, Linux, and Microsoft Windows, running business-critical applications such as Oracle FLEXCUBE, WebLogic, IIS, and Kafka-based data pipelines.

Monitoring tools were fragmented across Nagios, vCenter, Cisco tools, Elastic, and various freeware and homegrown scripts creating silos with no end-to-end visibility. As a result, IT teams lacked a clear understanding of service dependencies.

Reactive IT Operations & Outage Damage

The bank experienced frequent high-profile outages that attracted negative press coverage. The IT team was constantly in the firefighting mode, reactingto failures rather than preventing them. Executives were acutely aware that this reactive posture was damaging customer trust and the bank's reputation.

Tool Fragmentation & Blind Spots

The disparate array of monitoring tools, Nagios, vCenter, Cisco admin tools, Elastic, resulted in silos of data with no cross-tier correlation. Outages caused by issues like the API gateway going down (preventing customers from receiving one-time passwords) went undetected until users complained. The lack of visibility into hidden dependencies across all tiers of the infrastructure left the IT Team blind to the origin of problems.

No Proactive NOC & Slow MTTR

In the absence of a modern Network Operations Centre (NOC), problems were escalated slowly, often involving finger-pointing between IT Ops, DevOps, developers, DBAs, and the helpdesk. There was no single source of truth and troubleshooting consumed disproportionate time leading to long Mean Time to Resolution (MTTR).

Cost Barriers to Modern APM Adoption

The bank initially evaluated Cisco AppDynamics for APM. While it addressed most of the bank's needs for application monitoring, the per-CPU/RAM pricing model was financially unsustainable at their scale. With servers having 64 CPUs and 256 GB RAM and up to 80 application instances each, the total APM cost ran into multiple millions of Dollars. Furthermore, AppDynamics only handled the application monitoring needs, requiring another tool for infrastructure monitoring.

Strategic Modernization Mandate

Under new leadership, the bank launched a "Next Generation Bank" initiative to address growing operational complexity and cost barriers, while accelerating its digital transformation. The initiative focused on:

- Establishing a modern, proactive NOC
- Achieving full-stack visibility
- Overcoming cost inefficiencies driven by legacy systems and fragmented tools
- Enabling seamless digital banking experiences

The Solution: eG Enterprise

The Deployment

eG Enterprise was deployed across the bank's entire infrastructure in a matter of a few weeks, establishing the foundation for the bank's modern NOC:

- 400+ servers onboarded across hybrid environments
- 12+ critical banking services monitored, including core banking, payments, and digital channels
- Custom extensions deployed for APIs, payment gateways, ATMs, and branch networks
- Seamless ticketing integration for automated incident creation
- Unified observability across existing on-prem infrastructure and new AWS cloud deployment

During deployment, eG Enterprise uncovered previously unknown service dependencies, such as a critical API gateway acting as a hidden single point of failure. This enabled proactive alerting to prevent future outages.

What eG Enterprise Monitors

Business Services	E-Banking, Core Banking, Bill Aggregator, X Pay, Quick Pay, BI/Reporting
Application Tier	Oracle WebLogic, Microsoft IIS, Java Apps, Oracle FLEXCUBE Core Banking
Data & Messaging	Oracle DB, MS SQL, MySQL, Apache Kafka, DNS Servers, Active Directory
Infrastructure	Physical Servers, Storage Arrays, Network Devices, Load Balancers
Virtualisation & Cloud	VMware vSphere, Cloud Infrastructure (AWS), Microservices
Observability Data	Real User Experience, Synthetic Monitoring, Log Data, SNMP, Syslog, SCSI
Extended Coverage	Payment Gateways, ATMs, SDWAN, API Gateways, Branch Networks

What eG Enterprise Delivers

- **Full-stack visibility** across applications, databases,infrastructure, and cloud
- **Single-pane-of-glass monitoring** eliminating tool sprawl
- **Built-in APM + infrastructure monitoring** without requiring multiple tools
- **Cost efficiency at scale** especially for high-density environments
- **24x7** near-shore enterprise

Business Outcomes

66%
Reduction in Alerts Handled

12+
Core Services Monitored

<2 hrs
Max Tolerable Window for eG Maintenance

Proactive NOC, Not Reactive Firefighting

The bank's operations centre transitioned from reactive crisis management to proactive monitoring. This ensures that the problems are now triaged immediately and routed to the right team, eliminating days long diagnostic cycles that previously characterised major incidents.

Full Tool Consolidation

All custom scripts, freeware tools, Nagios, vCenter, Cisco admin tools, Elastic, and point solutions were replaced by eG Enterprise as the single pane of glass across the entire IT estate. This offers the bank one tool, one view, one source of truth.

Quantifiable MTTR & Performance Accountability

Role-based access with custom dashboards and enhanced collaboration between IT, helpdesk and developers now provide real-time visibility into incidents. This enables faster identification of bottlenecks, streamlined resolution workflows and reduced MTTR.

Third-party service providers are also measured on performance against SLA by the same system. This ensures an audit system that reviews performance across all tiers supporting business services.

Faster Root Cause Diagnosis

Automated performance correlation and baselining based on machine learning mean the team no longer guesses whether an issue lies in the network, server, storage, application, database, or cloud. eG Enterprise pinpoints the root cause automatically, compressing troubleshooting from hours to minutes.

Enhanced Collaboration Across Teams

Finger-pointing between IT Ops, DevOps,developers, DBAs, application support, and helpdesk has been eliminated. A shared, correlated view of the environment means every team works from the same data.

Cloud Migration Support

eG Enterprise had an active role in the bank's migration to AWS cloud, supporting transition of numerous applications using a mix of PaaS and serverless technologies. The platform provided pre- and post-migration performance benchmarks. These benchmarks helped application teams to validate that workloads performed well in the cloud as they did on-premises.

As part of the transformation, even the core banking system moved to a cloud-based model. Today, the bank leverages a wide range of modern application, infrastructure, and serverless technologies, including SAP S/4HANA, Apigee Edge gateways, Redis, DynamoDB, and AWS Lambda, all of which are monitored by eG Enterprise.

The platform enabled unified monitoring through a single console, allowing seamless visibility across both environments and supporting native monitoring of modern microservices-based applications.

Infrastructure Optimization & Cost Savings

Capacity and usage trend data from eG Enterprise feeds right-sizing decisions, ensuring the bank does not over-provision infrastructure and maximises ROI on every server and cloud instance.

Conclusion

eG Enterprise has become a mission-critical component of the bank’s IT operations, enabling continuous service assurance for millions of customers. By consolidating monitoring, enabling proactive operations, and supporting cloud transformation, the platform has helped the bank deliver a resilient, always-on digital banking experience.

Today, the monitoring platform is so integral to operations that even minimal downtime is unacceptable, highlighting its central role in ensuring business continuity.