

# Transform financial services through AI innovation with F5 and Google Cloud

Deliver secure, scalable AI applications that drive competitive advantage and customer value.

#### Use cases

# Enhanced account holder experience

Al-powered personalized banking and virtual assistants.

# Faster, more accurate fraud prevention

Real-time fraud detection with behavioral analytics.

# Simplified risk and compliance management

Automated regulatory reporting and risk assessment.

# Optimized operational efficiency

Document processing and workflow automation.

## Purposeful partnership to enable your evolution

As competitive pressure and customer expectations rise, delivering secure, scalable, and reliably high-performance Al applications is critical. Over 80% of global banking CEOs view generative Al as a crucial investment for driving business transformation, and over half of banking executives plan to use it to enhance productivity and reduce costs. However, because Al systems are highly distributed and financial institutions use three to four cloud service providers on average, IT environments are increasingly complex and hard to secure.

To help you overcome these challenges, F5 and Google Cloud provide the infrastructure, AI models, security, and application delivery solutions needed to take advantage of AI innovation, enabling use cases.

# Scalable and secure infrastructure, from edge to cloud

Harnessing the power of AI starts with a strong foundation. F5 and Google Cloud enable secure and efficient AI across distributed environments with:



Google Kubernetes Engine (GKE) for flexible and fast deployment



Google Cloud AI accelerators like Cloud Tensor Processing Units (TPUs) to optimize performance and cost



Google Distributed Cloud and F5® Distributed Cloud Customer Edge to support edge deployments that reduce latency and comply with data sovereignty laws

#### Comprehensive AI security

F5 and Google Cloud operationalize the Secure AI Framework (SAIF) across the entire AI application stack to protect against AI-specific threats that put sensitive data at risk and aid regulatory compliance with:

#### Al prompt monitoring

Real-time inspection with Al Gateway and Google Cloud Model Armor for Vertex Al to protect against prompt injection attacks that could result in data exposure or unwanted outputs that erode customer trust.

#### Financial data protection

Automated PII detection and redaction from AI prompts and responses using AI Gateway and Google Cloud Sensitive Data Protection support data privacy compliance.

#### **API** security

F5 Distributed Cloud API Security works with Google Cloud Apigee to discover and protect the critical APIs connecting AI models.

### Al development and deployment platform

Google Cloud eliminates traditional barriers to building Al-powered financial applications through Vertex Al, enabling end-to-end machine learning model development without requiring deep ML expertise. Pre-trained models from the Google Cloud Model Garden can be fine-tuned for a faster path to use cases, from smarter fraud detection to automated underwriting.

# Seamless AI application performance and delivery

F5 Al Gateway optimizes customer-facing Al workloads through intelligent routing that directs queries to the most appropriate models based on complexity and cost. Semantic caching identifies similar requests for faster responses, while rate limiting ensures consistent service quality during peak Al interaction periods and prevents costly Al model abuse.

Meanwhile, F5 Distributed Cloud Network Connect enables AI models to securely access distributed data sources in real time across Google Cloud, on-premises data centers, and other clouds. This unified data enables personalized customer experiences, knowledgeable chatbots, and instant insights for customer service reps via retrieval-augmented generation (RAG).

## Unified visibility and governance

F5 and Google Cloud enable centralized AI application monitoring to support AI performance, security, and compliance. AI Gateway provides native OpenTelemetry support to track AI model outputs, risk assessments, and compliance reporting in Google Cloud's observability suite, eliminating blind spots across all environments while supporting governance, risk, and compliance requirements.

# Accelerate financial services innovation with F5 and Google Cloud

F5 and Google Cloud are ready to help you maximize your Al ROI by simplifying model development, deployment, security, and infrastructure management. Strong data protection, consistent policies, and cost optimization features ensure your Al initiatives create a competitive advantage.

Get started by browsing F5 solutions on the Google Cloud Marketplace.

1F5, 2025 State of Application Strategy Report, Apr 2025

2 Infosys Knowledge Institute, <u>Cloud Radar: Banking Industry Report</u>, Oct 2024

