

COGNITIVE .ENGINE

PRODUCT SPECIFICATION

Cognitive Engine

Faster Decisions. Lower Cost. Stronger Governance.

A next-generation Commercial Loan Origination System (CLOS) designed for financial institutions seeking to accelerate lending, reduce operational friction, and embed expert credit judgment directly into automated workflows.

EXECUTIVE SUMMARY

Core Capabilities & Business Impact

Extreme Configurability

Fully no-code configuration of products, workflows, and risk models. Credit policies can be adapted in real time without development cycles.

Integrated AI

Native automation for document analysis and financial spreading. Cognitive engines replicate expert reasoning with full traceability.

Speed to Market

Implementation in 6–8 weeks (vs. 6–12 months for traditional LOS) using iterative configuration and stakeholder validation.

Dynamic Profiles

Capture multiple legal entities, trade names, and ownership structures in a single view—essential for complex corporate clients.

Regulatory Alignment

Risk models aligned with Basel III/IV standards, supporting PD, LGD, EAD, and RWA calculations across jurisdictions.

Scalable Architecture

A single-instance platform scaling seamlessly from micro-loans to large syndicated facilities.

INFRASTRUCTURE

Secure Cloud Architecture

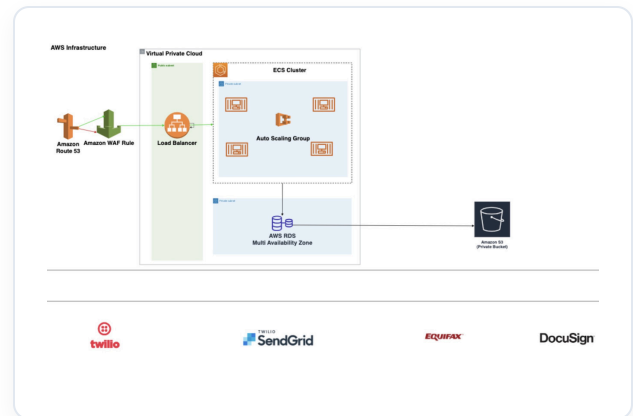
Cognitive Engine is built on a robust, auto-scaling AWS infrastructure designed for high availability and bank-grade security.

VPC Isolation: Private subnets for data persistence.

Auto-Scaling: ECS Clusters that adapt to load.

Resilience: Multi-AZ RDS deployment.

Defense: WAF Rules and Route 53 protection.



PROCESS FLOW

Standard Decision Model

1. Origination

Account managers initiate onboarding, structure facilities, and draft term sheets. Client prospects are profiled with full entity mapping.

2. Adjudication

Credit analysts perform financial spreading and risk assessment. AI assists with anomaly detection and pre-computed risk ratios.

3. Operations

Legal and operations teams finalize documentation, ensure regulatory compliance, and manage disbursement and post-funding obligations.

THE COGNITIVE LAYER

AI-Driven Automation

AI is natively embedded across the platform to enhance efficiency without compromising control. We move beyond simple OCR to semantic understanding.

Document Intelligence	Automated extraction and classification of data from PDFs and scanned financials.
Financial Spreading	Normalization of unstructured financial statements into analyzable formats.
Predictive Insights	Pre-computed ratios, anomaly detection, and KPI suggestions for analysts.
Workflow Acceleration	Automated routing, validation, reminders, and compliance checkpoints.

OPEN ECOSYSTEM

Seamless Integrations

Cognitive Engine is API-driven and open by design. It integrates seamlessly with major credit bureaus, core banking platforms (Fiserv, Oracle, Temenos),

and property registries via bi-directional synchronization.

Cognitive Group

1155 René-Lévesque Blvd West #2500
Montréal, QC H3B 2K4

+1 (415) 493-8559
info@cognitivegroup.com

© 2025 Cognitive Group. All Rights
Reserved.