

NovaPay – Document 09: Technology & Data Infrastructure

Version: Content-Only | Generated: 20 Oct 2025 | Company: NovaPay (UK)

Overview

NovaPay's tech stack supports core banking, screening, monitoring, and case management with a mix of cloud-native and legacy components.

Systems

Core banking: Thought Machine Vault. TM: SAS AML. KYC: Encompass (Tier 1). Sanctions: ComplyAdvantage. Case management: Actimize. Data warehouse: Snowflake. Cloud: AWS (UK/EU). Encryption: AES-256 at rest; TLS 1.3 in transit. Access: RBAC with MFA.

Architecture and Integration

Predominantly API-based; streaming limited. Some manual CSV transfers persist between fraud, AML, and KYC. Data retention: customers 7 years; transactions 5 years. GDPR controls: DPIAs for new data uses; DSR processes via ServiceNow.

Business Continuity

RPO 4 hours, RTO 24 hours; DR tested annually with failover to secondary EU region; last test passed with 3 minor actions (runbook clarity, contact trees, and restore validation).

Data Quality

Current scores: completeness 95%, accuracy 92%; quality issues concentrated in pre-2021 records and merchant onboarding metadata.

Weaknesses

(1) Legacy systems in some payment channels; (2) Limited API integration causing manual transfers; (3) Data quality gaps on older records; (4) Data silos across fraud/AML/KYC; (5) No unified analytics platform; (6) Limited real-time processing; (7) TM tech is 5 years old and due a refresh.

Planned Enhancements

Event streaming bus (Q4 2026); Master Customer Profile in Snowflake (Q2 2026); real-time risk scoring service (Q3 2026); TM platform upgrade or replacement (RFP in Q1 2026, budget \$0.5–1.0M).

Security and Privacy

Encryption standards enforced; privileged access reviews quarterly; audit logging centralized; privacy by design templates; cross-border data transfers via SCCs and UK IDTA where relevant.

Conclusion

Infrastructure is adequate but fragmented. Consolidating data and modernizing TM will unlock analytics and reduce manual effort.