



Working Paper: AI-Driven Transaction Governance Using Obiguard in Financial Institutions

Executive Summary

As financial institutions increasingly deploy autonomous AI agents to initiate and manage transactions, robust governance frameworks are essential to ensure compliance, security, and operational integrity. Obiguard, a Malaysian and Bumiputra-owned AI governance Platform-as-a-Service (PaaS), provides real-time policy validation, continuous monitoring, and comprehensive audit trails to govern AI-driven transaction requests. This working paper outlines the transaction workflow using Obiguard, emphasizing alignment with Bank Negara Malaysia (BNM) regulatory standards to ensure responsible AI adoption in banking and credit institutions.

Introduction

The adoption of agentic AI systems in financial institutions is transforming transaction processing by automating decision-making and execution. However, the autonomous nature of these AI agents introduces risks related to unauthorized transactions, regulatory non-compliance, and operational failures. To address these challenges, Obiguard offers a

governance platform that validates AI transaction requests against policies compliant with BNM standards, monitors AI responses in real time, and maintains detailed audit logs.

This working paper presents a clear workflow of how Obiguard governs AI-initiated transactions, ensuring secure, compliant, and transparent operations in financial institutions.

Transaction Workflow Using Obiguard

The process begins with an AI agent autonomously generating a transaction request. This could involve activities such as loan approvals, fund transfers, trade executions, or portfolio adjustments.

Obiguard receives the transaction request and immediately validates it against a comprehensive set of governance policies. These policies are designed to comply with Bank Negara Malaysia's regulatory framework, including risk management, anti-money laundering (AML), know-your-customer (KYC), and fair treatment of consumers. Validation ensures that the transaction adheres to internal risk limits and regulatory mandates before proceeding.

Once validated, Obiguard continuously monitors the AI agent's responses and actions in real time. This monitoring detects anomalies, suspicious patterns, or deviations from expected behavior, enabling rapid intervention to prevent fraud, errors, or unauthorized activities.

All transaction requests, validations, monitoring events, and final decisions are logged comprehensively. Obiguard maintains an immutable audit trail that supports regulatory reporting, internal audits, and compliance reviews. This transparency is critical for demonstrating accountability and building trust with regulators and stakeholders.

After successful validation and monitoring, the transaction is approved and finalized. The approved transaction details are sent to the end user for confirmation and simultaneously forwarded to the relevant trading or transaction platform for execution.

Workflow Image Explanation



The workflow image illustrates the step-by-step process of how Obiguard governs AI-initiated transaction requests within financial institutions, ensuring compliance with Bank Negara Malaysia (BNM) regulatory standards.

The process begins with an AI Agent initiating a transaction request, such as a loan approval, fund transfer, or trade execution. This request is sent to the Obiguard AI Governance Platform, which acts as the central control point for validating and monitoring AI activities.

First, Obiguard validates the transaction request against predefined policies that are fully compliant with BNM regulations. This validation ensures that the transaction adheres to internal risk limits, regulatory mandates, and ethical guidelines before any further processing.

Next, Obiguard monitors AI responses in real time, continuously observing the behavior of the AI agent to detect any anomalies, suspicious patterns, or deviations from expected conduct. This real-time monitoring allows for immediate intervention if any risks or compliance issues arise.

Simultaneously, Obiguard logs and maintains a comprehensive audit trail of all transaction requests, validations, monitoring events, and final decisions. This audit trail is essential for regulatory reporting, internal audits, and maintaining transparency and accountability.

Once the transaction request passes validation and monitoring, it becomes a final approved transaction. The approved transaction details are then sent to the user for confirmation and simultaneously forwarded to the trading or transaction platform for execution.

This workflow ensures that every AI-driven transaction is securely governed, compliant with BNM standards, and fully auditable, thereby mitigating risks and fostering trust among regulators, customers, and stakeholders.

Benefits of Using Obiguard for Transaction Governance

Obiguard ensures all AI-driven transactions comply with BNM's regulatory standards and guidelines, reducing the risk of penalties and reputational damage. Real-time validation and monitoring prevent unauthorized or risky transactions, enhancing operational security. Comprehensive audit trails provide clear documentation for regulatory audits and internal governance. The platform automates governance processes without slowing down transaction speeds, enabling scalable AI adoption. This demonstrates commitment to responsible AI use, fostering confidence among regulators, customers, and stakeholders.

Alignment with Bank Negara Malaysia (BNM) Standards

Obiguard's governance framework is explicitly designed to align with BNM's principles for responsible AI adoption in the financial sector. This includes adherence to BNM's guidelines on risk management, data privacy, AML/KYC compliance, and fair treatment of financial consumers. By embedding these regulatory requirements into its validation and monitoring processes, Obiguard helps financial institutions meet evolving regulatory expectations while leveraging AI innovation.

Conclusion

Obiguard provides a robust, scalable, and compliant solution for governing AI-initiated transactions in banks and credit institutions. By integrating real-time policy validation, continuous monitoring, and detailed audit logging, Obiguard ensures that autonomous AI agents operate securely and responsibly within the regulatory framework set by Bank Negara Malaysia. This governance capability transforms AI transaction management from a potential risk into a strategic advantage, enabling financial institutions to innovate confidently and maintain trust.

About Obiguard

Obiguard is a Malaysian and Bumiputra-owned company specializing in AI governance solutions. Our Platform-as-a-Service empowers financial institutions and other sectors to deploy autonomous AI agents securely and compliantly, supporting innovation while safeguarding regulatory adherence and operational integrity.

Contact Information

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