Empowering Real-Time Payments Intelligence: A Migration to AWS Bedrock AgentCore

Executive Summary

Deuna is a leading Latin American fintech platform that provides AI-powered payments orchestration, frictionless one-click checkout solutions, and advanced fraud prevention for global e-commerce merchants. Processing millions of transactions for enterprise clients like KFC and Sony, Deuna connects over 400 global payment providers into a single API. Their core innovation is Athia, a "commerce-aware" AI platform designed to transform fragmented payment data into real-time, actionable growth strategies through a natural language interface.

Customer Challenge

Athia experienced explosive market adoption, growing 24% monthly with over 50 enterprise clients actively using or piloting the platform. However, this rapid scaling exposed critical technical bottlenecks. Deuna's multi-agent AI architecture (utilizing 8+ agents) suffered from severe latency issues, taking 1.5 to 2 minutes to answer complex queries. Deuna engaged binbash to provide elite GenAI Architecture, DevOps Engineering, and Technical Leadership to untangle these bottlenecks, reduce latency by 50%+, and build a cost-effective, secure AWS-native foundation.

Solution

Operating as a strategic advisory partner, we implemented a "Guided Evolution Model" focused heavily on knowledge transfer and architecture design. We empowered Deuna's engineering team to build the solution. We guided them through the migration of their heavy AI orchestration workload to **Amazon Bedrock AgentCore**.

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“They had an in-depth knowledge of AWS tools and experience in real-world projects.

binbash’s work reduced development time, application latency, and costs while modernizing the client’s tech stack. The team led weekly online sessions for progress tracking, managed queries via Slack and email, and held exceptional meetings for critical issues. Their creativity stood out.”

Israel Gerardo
Data Director at Deuna

Key Components of the Solution

Acting with CTO, Product Management, and Cloud Architecture capabilities, we mentored Deuna's team through an enterprise-grade modernization:

1. **GenAI Architecture & Mentorship:** We advised Deuna's engineers on transitioning their multi-agent workflows to Amazon Bedrock AgentCore, recommending Anthropic models like Claude Sonnet and Claude Opus to dramatically speed up reasoning and reduce latency.
2. **Security & Compliance Advisory (PCI DSS):** We designed an AI safety layer using Amazon Bedrock Guardrails and provided reference implementations. We guided Deuna on configuring this firewall to actively scrub PII and block prompt injection attacks before they hit the LLM.
3. **Observability & Evaluation Strategy:** We co-designed an automated "LLM-as-a-Judge" evaluation pipeline utilizing CloudWatch, Kinesis Firehose, Lambda, and Amazon Bedrock Evaluations, mentoring the team so they could implement continuous accuracy monitoring.

Results

By absorbing our architectural guidance and technical leadership, Deuna's engineering team successfully built a secure, high-performance AWS-native foundation. This strategic mentorship empowered them to decouple from expensive third-party compute, taking absolute control over their GenAI operational costs and targeting sub-minute response times.

Key Milestones

Milestone 1: Internal Assessment & Discovery: Audit current data/AI bottlenecks to identify latency reduction opportunities.

Milestone 2: Architectural Design: Co-design the AWS-native target architecture and provide the blueprint for an Amazon Bedrock AgentCore Proof of Concept.

Milestone 3: Guided Implementation & Acceleration: Deuna's team builds the PoC with binbash providing weekly sprint planning, real-time code reviews, and intensive workshops.

Milestone 4: Security & Evaluation Hardening: Advise on integrating active PCI DSS-compliant PII scrubbing via Bedrock Guardrails and deploying an automated semantic evaluation pipeline.

Metrics

50%+
Target performance lift in chatbot response times

<60s
Multi-agent query SLA (down from 1.5–2 min)

10–15x
ROI delivered for enterprise merchants

Conclusion

Through this consulting engagement, binbash successfully guided Deuna in evolving "Athia" from a constrained, high-latency application into a highly scalable GenAI product. Relying strictly on the AWS Well-Architected Framework, our team delivered deep technical advisory, code reviews, and architectural blueprints. By empowering Deuna's developers to implement Amazon Bedrock AgentCore and stringent AI guardrails themselves, we not only solved their immediate scaling crisis but left them with a highly capable, self-sufficient engineering team ready to dominate the Latin American enterprise market.