

Why AI led Engineering is central to the emerging world

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The market is bigger than ever due to Agentic AI

AI and Agentic AI execution techniques have redrawn the business case for large-scale, complex tech transformation

There are programs CIOs wanted but couldn't justify

They knew they had to modernize, platformize and build new products. But they were limited by

- **Budget availability:** 60% of budgets are trapped in Run costs
- **Risks of Modernization**
- **Timelines for new builds**

What AI changes about the equation

We can now use AI Agents to significantly change the business case while tapping into our traditional strength in Engineering

- **Run & fix applications**
- **Surface legacy complexity**
- **Build applications & platforms**

What it means for us

This unlocks three massive opportunities for us

- 01. Modern AMS**
- 02. Tech Modernization**
- 03. AI-Native Product Engineering**

We have redefined our Engineering offerings to being AI-led

AI-assisted

Conventional pods of human engineers with AI used as copilots



AI-led

Humans and AI Agents working together in Mod Squads

AI-native Product Engineering

Build innovative products and platforms, adopt a product-centric mindset.

Tech Modernization

Transform systems into scalable, cloud-ready, future-proof AI-ready platforms.

Modern AMS

Enhance reliability, performance, and resilience with AI-driven application management.

Enterprise Integration

Enable seamless secure connectivity between enterprise systems and the AI ecosystem.

AI-enabled SDLC Transformation & Organizational Change Management

Enable transformation to fully agentic execution through structured change enablement aligning people, processes and technology.



Deal Archetype 1

Modern Application Management Services (AMS)

AI-led application management

01

The Global Bank Payments AMS story



High escalation load on Application Run teams & Subject Matter Experts



Knowledge gap limits first-time fix

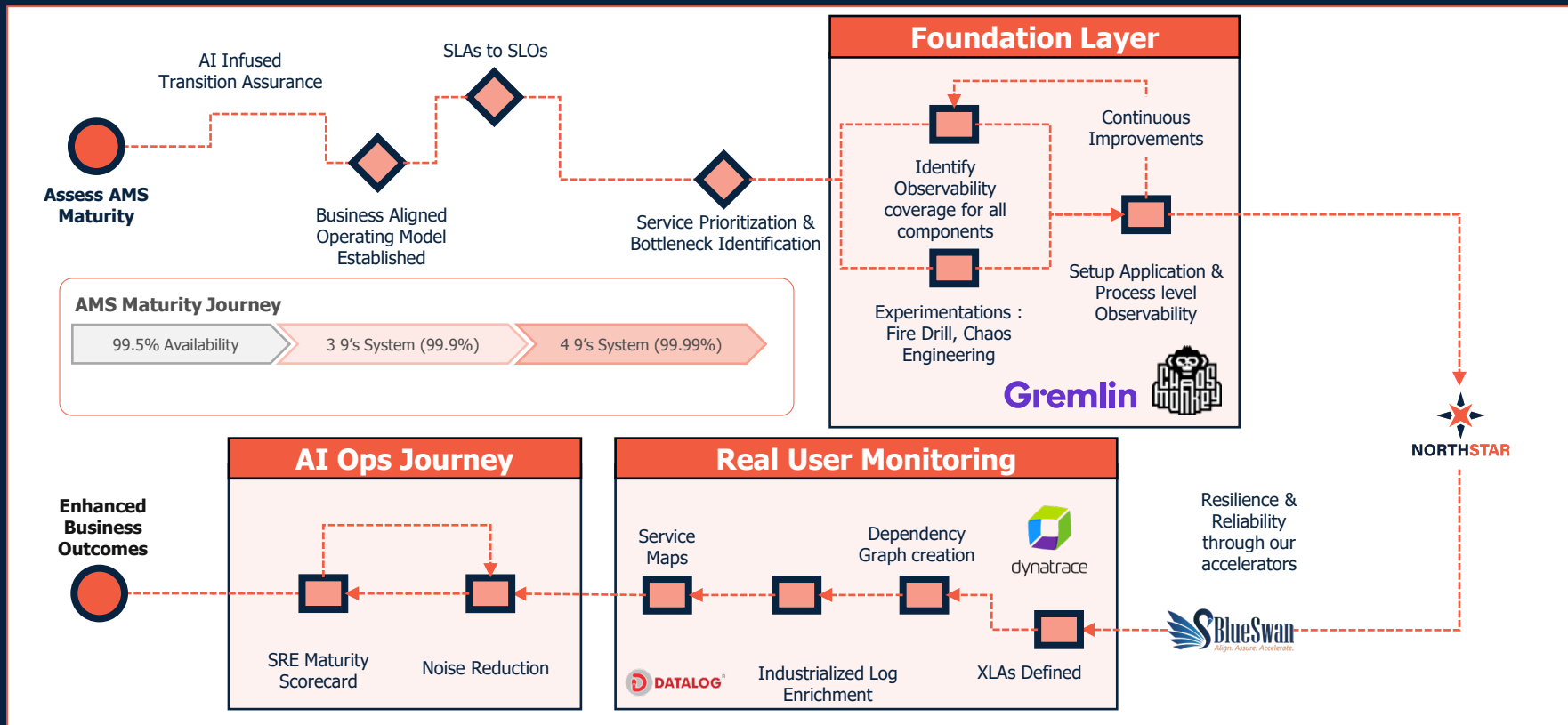


Opportunity to reduce toil by institutionalizing tribal knowledge



Service loss due to SME dependency wait

This is how we would have addressed this need before...



...this is how we are addressing it now



- 1 Alert Intelligent Agent**
 Alert Reduction **~70%**
 Event & Alert Mgmt.
- 2 Observability Agent**
 Monitoring Coverage **~100%**
 Observability/ Monitoring
- 3 Self-healing Runbook Agent**
 MTTR Reduction **~65%**
 Event & Alert Mgmt.



- 4 Smart KB Agent**
 KB Enrich **~200%**
 Knowledge Mgmt.
- 5 Predictive Incident Detector Agent**
 Repeat Incident **~40% ↓**
 Problem Mgmt. / RCA
- 6 Auto DR & Health Check Agent**
 DR Automation **~100%**
 Tools Adoption/ Automation

Alert Detection & Triage	Incident Classification & SLA Governance	Resolver Engagement & Escalation	Resolution & MTTR Management	Post-INC Review & RCA	Problem & Change Governance	Continuous Service Improvement
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AI First Business Outcome Focused Approach



Deal Archetype 2

Tech Modernization

From high-risk, high-cost legacy programmes to AI-accelerated transformation

02

Leading Financial Services Client in North America

Modernizing a monolithic Electronic Invoice Presentment and Payment platform



Losing competitive deals



Inability to scale globally



Architecture is blocking agility



Reliability gaps impacting clients

THE BUSINESS OPPORTUNITY

6M+ Merchant base

Global Market

North America, APAC,
Latam, EMEA

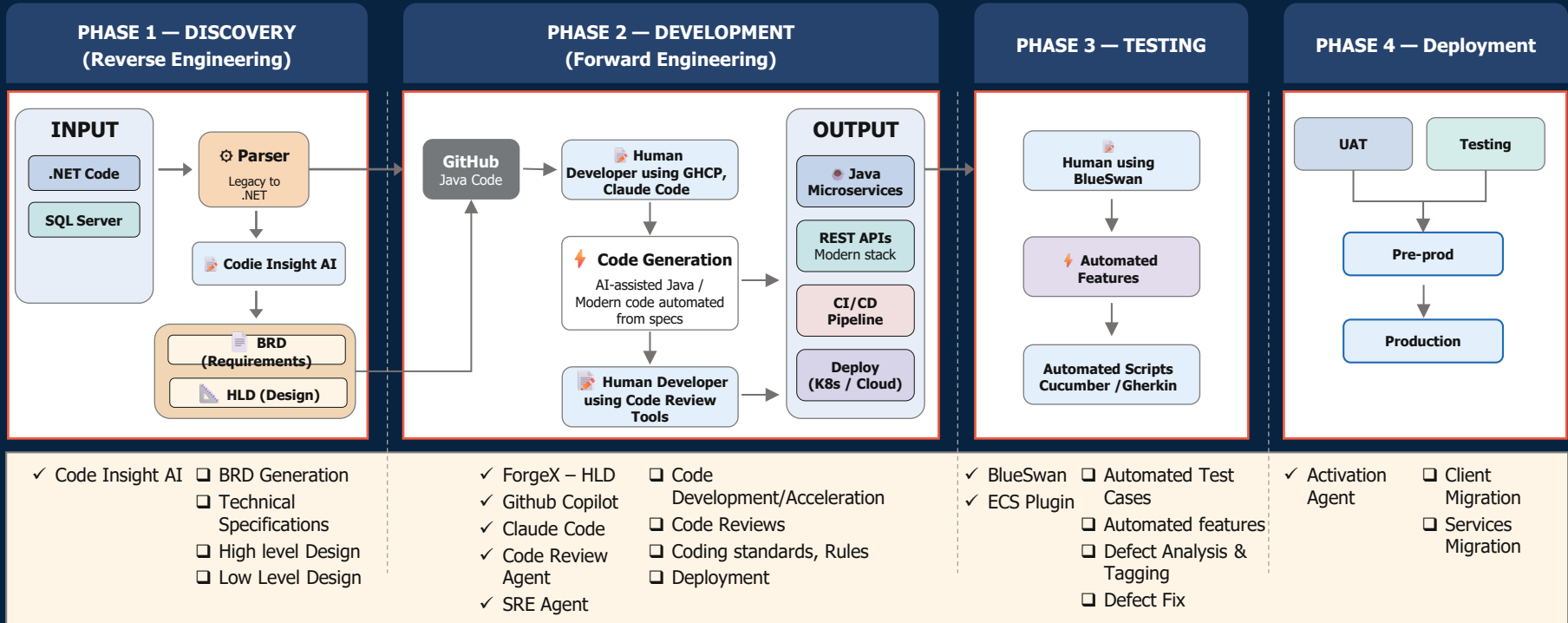
Needs Modern Architecture

24x7, zero downtime,
Active-Active, Auto Scaling

Timeline

Modernize 20+ year application
much ahead of June 2027

This is how we would have addressed this need before...



...this is how we are addressing it now

Phase 1 — Ingestion Pipeline



Spoon JSON Parser Agent

Reads Java/C# AST JSON, extracting symbols with names, signatures, file paths, and source lines.



Writer Agent

Inserts all symbols into PostgreSQL tables for code files, docs, chunks, and comments



Human in the loop



Graph Builder Agent

Constructs a labeled property graph (Apache AGE) with deterministic UUID v5 node identities.



Embedding Writer Agent

Generates 768-dim semantic vectors via Ollama nomic-embed-text; stored in VectorChord.



Human in the loop



PageRank Scorer Agent

Computes symbol importance from the call graph using iterative power-method PageRank.



Drift Detector Agent

Validates import edges against DDD layer rules (Domain → Infra → Presentation).

Phase 2 — Domain Analysis Pipeline



Projection Builder Agent

Loads raw graph, filters noise (Swagger DTOs, generated code), adds cosine-similarity semantic edges.



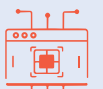
Community Detector Agent

Runs multi-resolution Leiden algorithm to cluster symbols into candidate bounded contexts.



LLM Refiner Agent

Names and characterizes each community as a DDD bounded context via LLM prompting.



Iterative Restructurer Agent

Multi-pass LLM optimization of bounded context boundaries for cohesion and clarity.



LLM Judge Agent

Scores each context on cohesion, naming quality, and boundary definition; prunes weak ones.



Human in the loop



Artefact Derivation Agent

Generates user stories, Gherkin scenarios, domain events, aggregate roots, and glossary.

Phase 3 — Forward Engineering



DDD Snapshot Agent

Transforms Phase 2 analysis into a structured domain snapshot with rubric gating.



BRD Generator Agent

Produces a business requirements document from the DDD snapshot via LLM reasoning.



Human in the loop



Workflow + Gherkin Agent

Derives workflow diagrams and acceptance test scenarios from requirements.



API Contract Agent

Generates the OpenAPI spec — the pivot point from which all code generation flows.



Human in the loop



.NET Scaffold + FE Agent

Creates full .NET Clean Architecture solution with domain, infra, and presentation layers.



KEDA + Postman Agent

Deterministically generates KEDA manifests for event-driven scaling and Postman collections.



Deal Archetype 3

AI-Native Product Engineering

Deep Engineering expertise supported by Agentic AI

03

The Australian Airline story



Legacy Passenger Service System (PSS) exit by 2029 with no room for slippage



Business transformation at scale enabling new operating models



Multi platform ecosystem needs a partner to orchestrate effectively



Parallel-run integrity, ensuring zero business disruption

This is how we would have addressed this need before...

01 Requirements

BAs run workshops with Q Group SBSMs across 6 domains. Each domain separately. Weeks of meetings before a user story is written.

No AI tool applied

This stage remains entirely manual with no AI assistance in a traditional model.

02 Architecture

Architects review requirements documents, manually cross-reference IATA NDC standards, and produce design artefacts. No automated validation.

⚡ AI: Standards lookup

ChatGPT used ad hoc to query IATA docs. Output not connected to design tooling. Architect still writes every artefact manually.

03 Development

Engineers write integration code, EDIFACT adapters, and API connectors by hand. Requirements are re-interpreted from static documents. Context drift is common.

⚡ AI: Code completion

GitHub Copilot suggests code snippets inline. Useful for boilerplate. Does not understand the broader architecture, IATA constraints, or programme context.

04 Testing

QA engineers write test cases from requirements documents. Test cases are created after development completes. PNR-Order reconciliation is manually checked.

⚡ AI: Test case drafts

AI generates first-draft test cases from user stories. Disconnected from code changes, test coverage gaps only discovered during execution.


05 Deploy & Operate

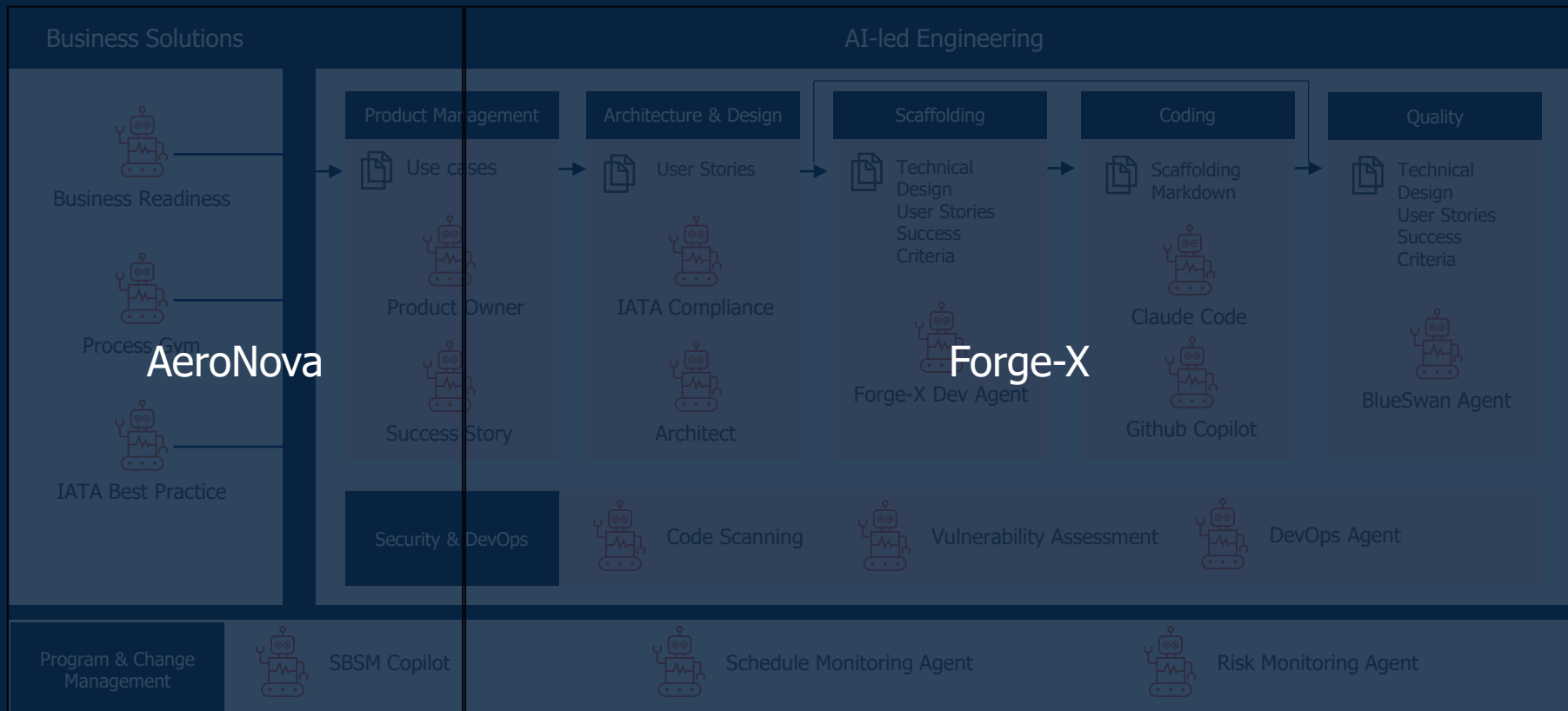
Cutover runbooks authored manually. Production monitoring is reactive — incidents detected after they surface. No predictive risk detection before go-live.

⚡ AI: Ticket Analysis

Very little reactive AI

...this is how we are addressing it now

 Output of previous stage, input to current stage





Key Takeaways – Coforge AI-led Engineering

- 01 We have dismantled and rebuilt our Engineering offerings on an AI backbone**
- 02 Our demonstrable solutions are making the business case come alive for clients**
- 03 Our hyperfocus on domain puts us at an advantageous position as code becomes commodity**
- 04 Together, these factors are helping us unlock the business case for CIOs enabling them to kick off large NECESSARY transformation programs that they so far could not**

Thank you

