

Built for the Real World: Deploying AI at Institutional Scale.

Philippe Küng: A Strategic Briefing for the
AI Product Engineer, Deployed Role.



Brain Co. builds the operating system for the world's most critical institutions—sovereign governments, energy grids, healthcare systems.

I am the engineer who leaves the lab, embeds with the customer, and ensures that technology survives contact with reality. I build from zero, take ownership from day one, and deliver production-grade AI.



The Archetype You Need: Founder Agility Meets Enterprise Rigor.



The Founder's Ownership (Zero to One)

Brain Co. demands builders who own the outcome. As the founder of The Code Venture and Clinic of AI, I bootstrapped ventures to €1M+ in revenue. I translate ambiguous C-suite priorities into production-grade Python and JavaScript, operating with the autonomy of a hands-on CTO.



The Enterprise Rigor (Scale & Security)

As Head of Data & AI for Crayon (Microsoft's top global partner), I built the practice from the ground up and navigated the complex IT landscapes of national-scale organizations. Expert in architecting compliant guardrails for highly regulated industries—essential for sovereign deployments.



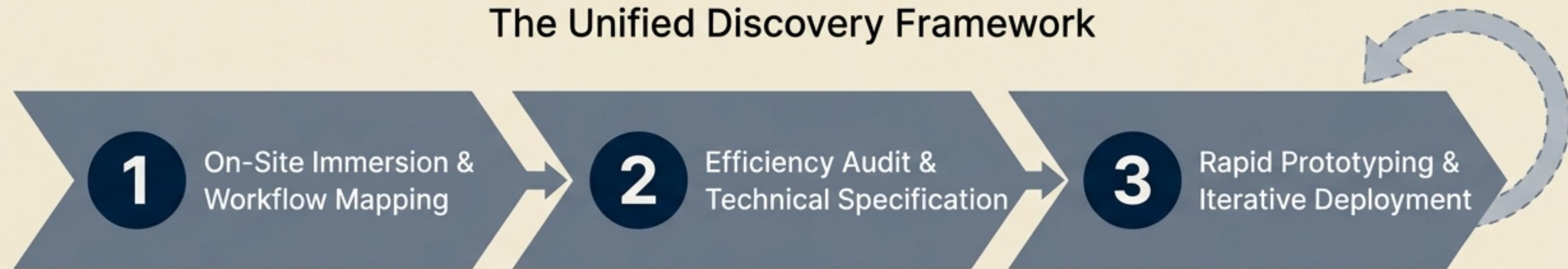
The Full-Stack Architect (Spec to Deployment)

I architect the complete solution—from the React/TypeScript front-end to scalable backend data pipelines (Azure, AWS, GCP) and robust MLOps infrastructure.

Credentials: Data Engineering & Machine Learning (MIT), UX Design (UAL).

The Deployed Framework: Turning On-Site Ambiguity into Production Code

The Unified Discovery Framework



Deploy on-site, coding side-by-side with Subject Matter Experts to map the "unwritten rules" and true friction points of the client's operational workflow.

Translate qualitative operational bottlenecks (e.g., administrative overhead, compliance risk, throughput limitations) into a rigorous engineering specification, defining the precise technical requirements and KPIs needed to achieve ROI.

Operate in tight feedback loops: "talk to users → write code → test → repeat." Move from discovery to a functional prototype in days, not months, prioritizing high-impact wins to prove value and secure stakeholder buy-in.

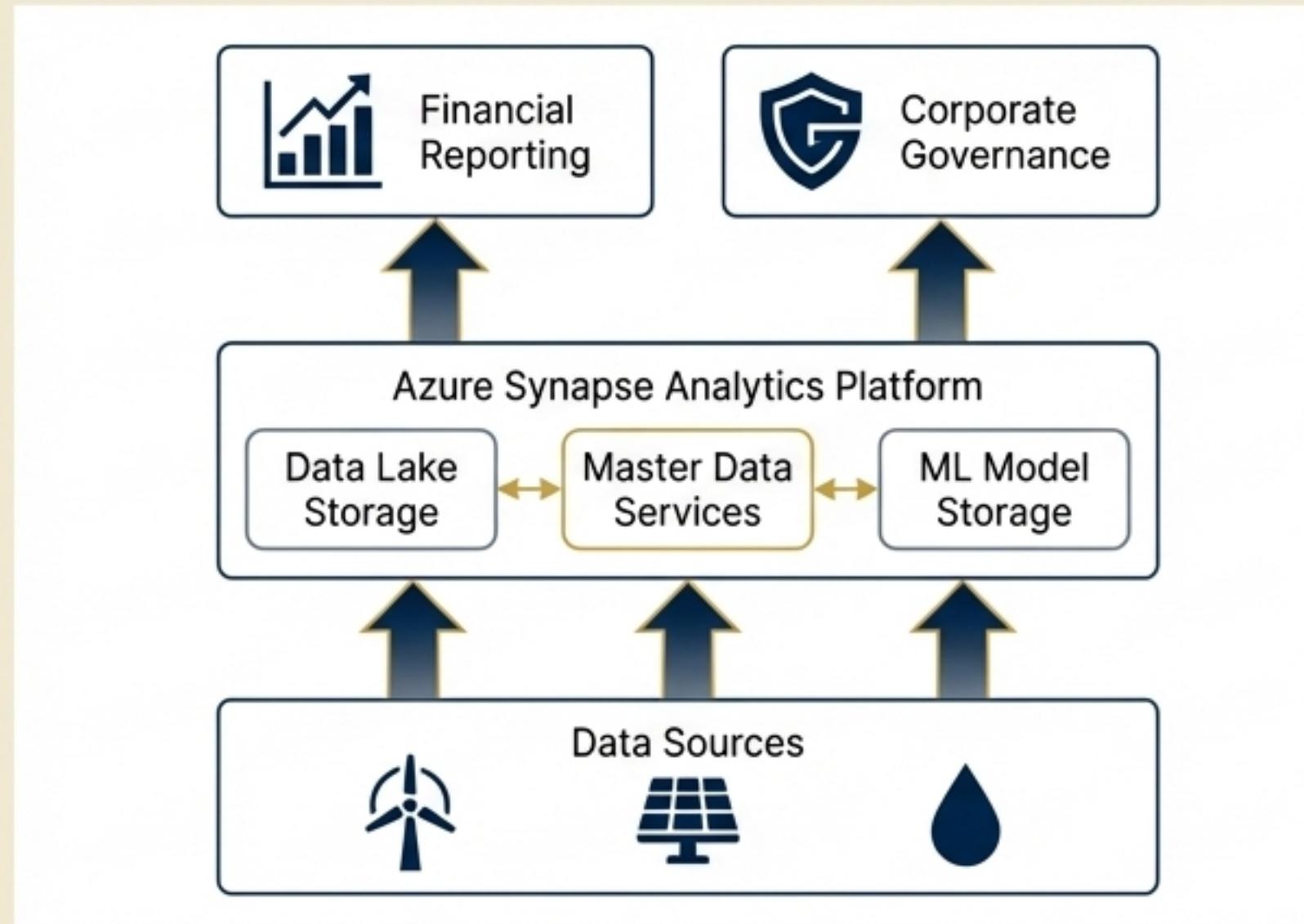
Proven Impact Across Brain Co.'s Core Sectors



My experience is a direct mirror of Brain Co.'s mission. The following projects demonstrate a track record of delivering tangible, production-grade outcomes in Energy, Sovereign Government, and Healthcare.

Case Study | Energy & Critical Infrastructure: Modernizing the National Grid

Client: NTE (National Energy Provider, Norway)



Challenge/Build/Impact

The client's legacy on-premise infrastructure had high costs, limited capacity, and could not integrate new data sources for power generation, grid downtime, and consumption, hindering effective corporate governance.

The Build

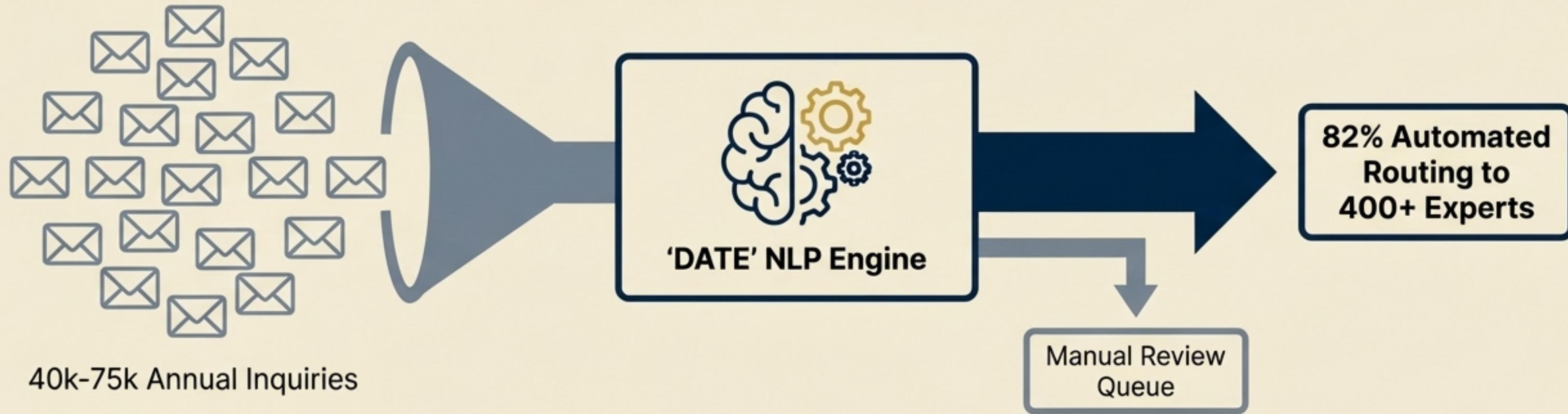
Architected and deployed a full-scale, cloud-native data warehouse on Azure Synapse Analytics. The platform integrated Master Data Services and storage for machine learning models, ingesting real-time data from disparate sources (wind, solar, hydro, grid sensors).

The Impact

Replaced capacity-limited legacy systems, enabling consistent and fact-based corporate governance. Delivered faster, more comprehensive financial reporting and improved data quality for managing critical national infrastructure.

Case Study | Sovereign Government & Compliance: Automating Regulatory Workflows

Client: DNV (Global Classification Society & Sovereign Advisor)



The Challenge

DNV's helpdesk manually routed 40,000-75,000 complex technical inquiries per year regarding vessel certifications to 400 experts, a slow process with a risk of **inconsistency**.

The Build

Developed and deployed 'DATE' (Digital Access to Experts), an NLP text classification engine. The model was trained on a dataset of **200,000 emails** across **650 categories** and weighted using TF-IDF to understand **domain-specific** keywords.

The system was productionized to guarantee a **4-hour client response SLA**.

The Impact

Achieved **82% automated routing** of sovereign-level compliance inquiries.

Delivered direct annual savings of **~\$200k** in manual workload and significantly **improved customer service** and **consistency**.

Case Study | Advanced Healthcare Systems: Streamlining Quality & Safety Audits

Client: A Global Healthcare Quality Improvement & Accreditation Organization



Auditor's Note:
"Observed deficiency..."



Result: Standard 4.B.1 -
"Medication Safety Protocol"



The Challenge

During hospital surveys, auditors must match observed deficiencies from thousands of potential issues to the correct complex standard. This manual process was time-consuming, prone to error, and led to inconsistent rule interpretation.

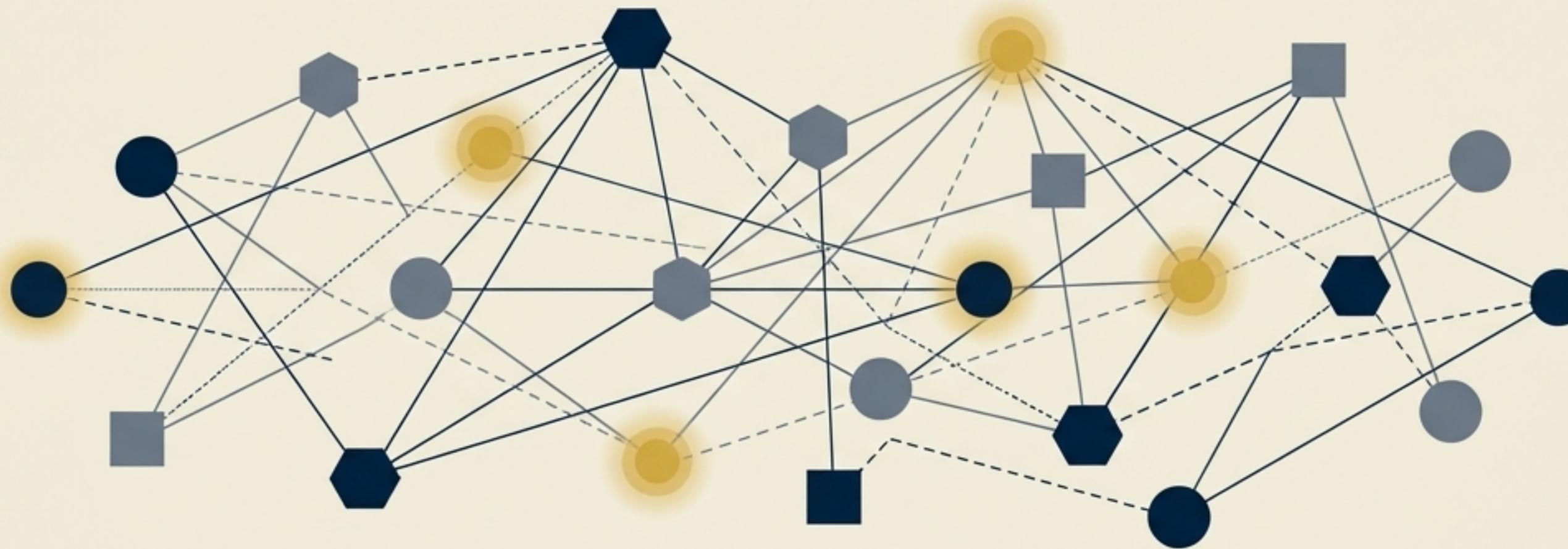
The Build

Developed a Semantic Search solution to match unstructured, textual descriptions of an observation to the correct regulatory standard. The complete platform was built on Azure using PyTorch for the model, Data Factory for acquisition, and Azure Kubernetes Service (AKS) for production-grade operationalization.

The Impact

Significantly reduced errors made by surveyors and **decreased time** spent searching for standards. Resulted in **higher consistency in rule interpretation** and a **more efficient, streamlined accreditation process** for hospitals globally.

Engineering the Technology Frontier



Beyond automating known processes, I build systems that engineer institutional decision-making. The following projects demonstrate mastery over the emerging technologies that define the next wave of applied AI: Advanced RAG, Multi-Agent Systems, and Sovereign LLM Deployment.

Frontier Portfolio | Project Guardian: Advanced RAG for Institutional Knowledge & Risk

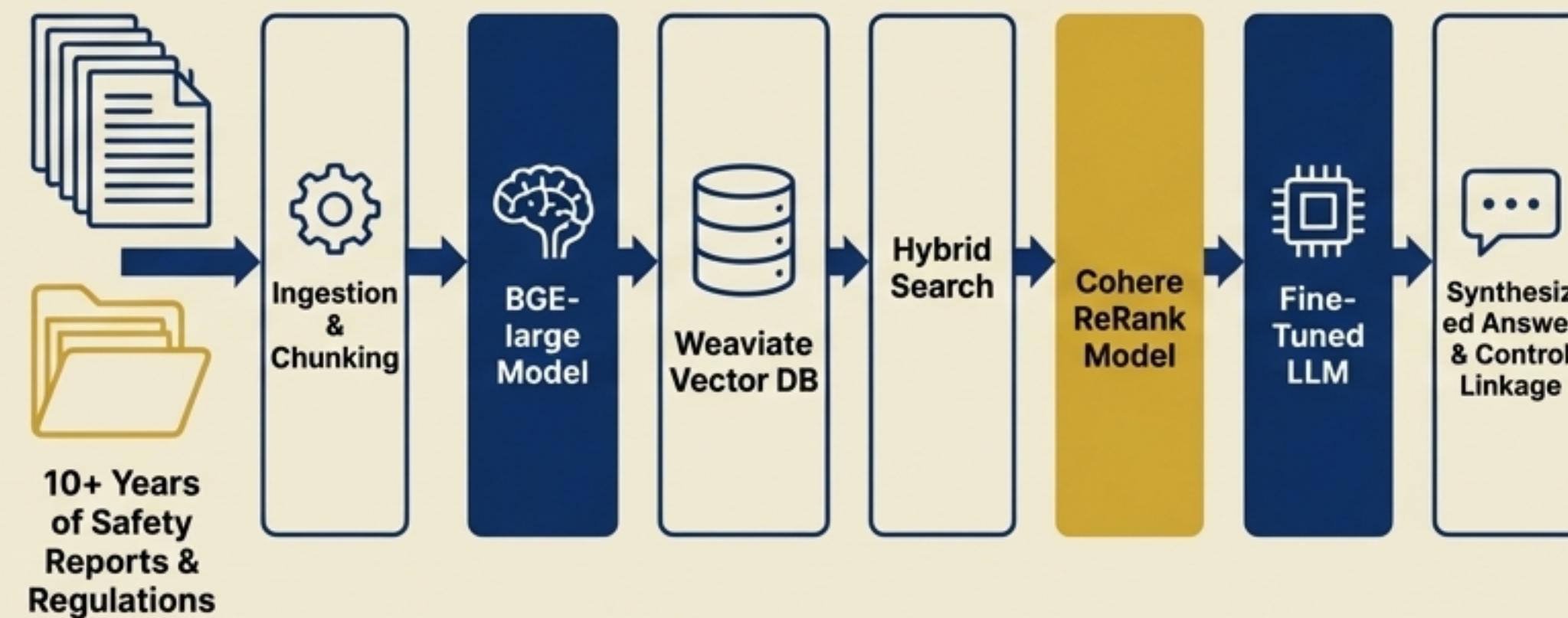
Client: Downer Group (Leading Integrated Services Provider, ANZ)

Challenge

Managing operational risk by connecting unstructured incident reports to a vast library of 16,000 documented Health, Safety, and Environment (HSE) controls in real-time.

The sheer volume made manual analysis and learning impossible.

Technical Architecture



Impact

Achieved up to **80% accuracy** in identifying and linking relevant safety controls to incident reports in seconds.

The system now serves as a **“corporate cortex,”** transforming HSE management and providing instant, reliable access to critical institutional knowledge.

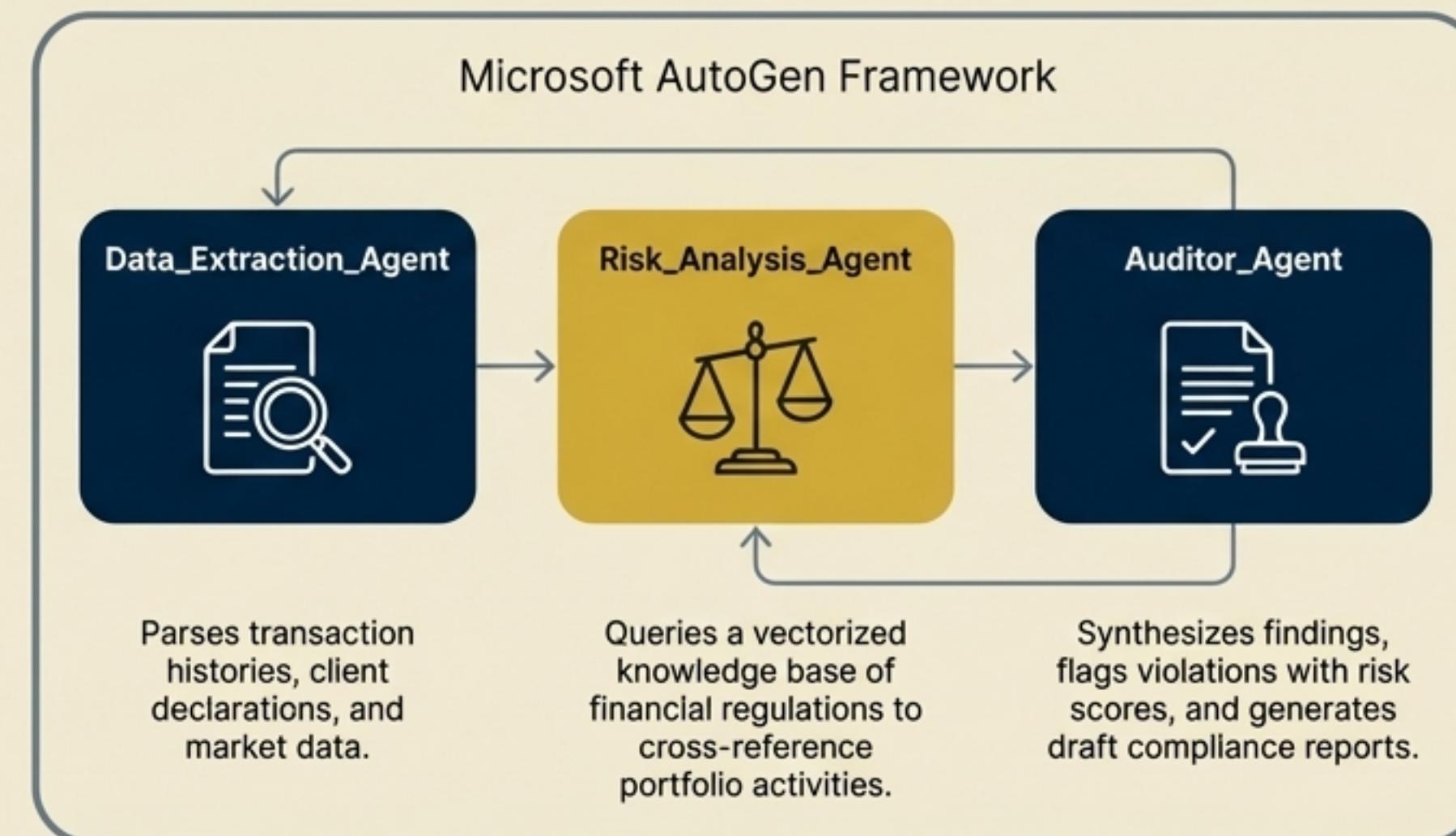
Frontier Portfolio | Project Chimera: Multi-Agent Automation for Financial Compliance

Client: A Swiss-based Private Wealth Management Firm

Challenge

The firm faced a significant operational burden in manually reviewing high-net-worth portfolios against evolving and complex regulatory frameworks like FinSA (Financial Services Act), AML (Anti-Money Laundering), and KYC (Know Your Customer). The process was slow and susceptible to human error.

Technical Architecture



Impact

Reduced manual portfolio review time by an estimated 60% and increased the detection rate of compliance anomalies by 25% in pilot testing. Provided auditors with a powerful tool to focus on high-risk exceptions.

Frontier Portfolio | Project Citadel: Production-Grade LLM Ops for a Sovereign Entity

Client: A National Ministry of Economic Development

Challenge

The Ministry required an internal generative AI capability to draft policy briefs and analyze sensitive economic data. The solution had to be fully deployed on a private, air-gapped cloud, with high performance and complete data sovereignty. Commercial APIs were not an option.

Technical Architecture



Impact

Successfully deployed a sovereign, secure, and highly performant LLM for internal government use, ensuring complete control over sensitive national data while providing a powerful analytical tool for policymakers.

The Production-Grade AI Stack

GenAI & Agentic Workflows

Models & Frameworks: LLM Fine-Tuning (PEFT, LoRA), RAG Architectures, Multi-Agent Systems (AutoGen), Transformer Models, LangChain.

Platforms & APIs:   

OpenAI, Anthropic, Hugging Face, Llamalndex.

MLOps & Production Readiness

CI/CD & Orchestration:    

Azure DevOps, Kubernetes, Docker, Terraform.

Platforms:    

Azure ML, AWS SageMaker, Kubeflow, Databricks.

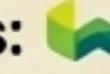
Practices: Model Versioning, Monitoring (Drift, Bias), Performance Optimization (Quantization, TensorRT).

Full-Stack Application Build

Frontend:  , TypeScript.

Backend: 

Python (Expert), JavaScript, Java, RESTful APIs.

Databases:  Weaviate 

SQL (Advanced), NoSQL, Vector Databases (Weaviate, Pinecone).

Data Engineering & Integration

Pipelines & Processing:  

Azure Data Factory, Apache Spark, ETL/ELT Design, Data Modeling.

Infrastructure:  

Azure Synapse Analytics, AWS Redshift, Data Lakes (ADLS Gen2).

Ownership from Day One. Ready to Deploy.

- **Global Mobility:** Eager and prepared to deploy on-site—starting with the UAE—for 6+ months to embed with your customers and guarantee success.
- **The Ethos:** I understand this is not a 9-to-5 role. It is a mission to upgrade the world's operating system. I am built for the ambiguity and intensity of zero-to-one product development in high-stakes environments.
- **The Value Proposition:** I bring the engineering skill to build it, the product sense to design it, and the client-facing aptitude to deploy it.



Let's Build.



Philippe Küng



philippelobokung@gmail.com



+41 79 960 8477



linkedin.com/in/philippe-kueng