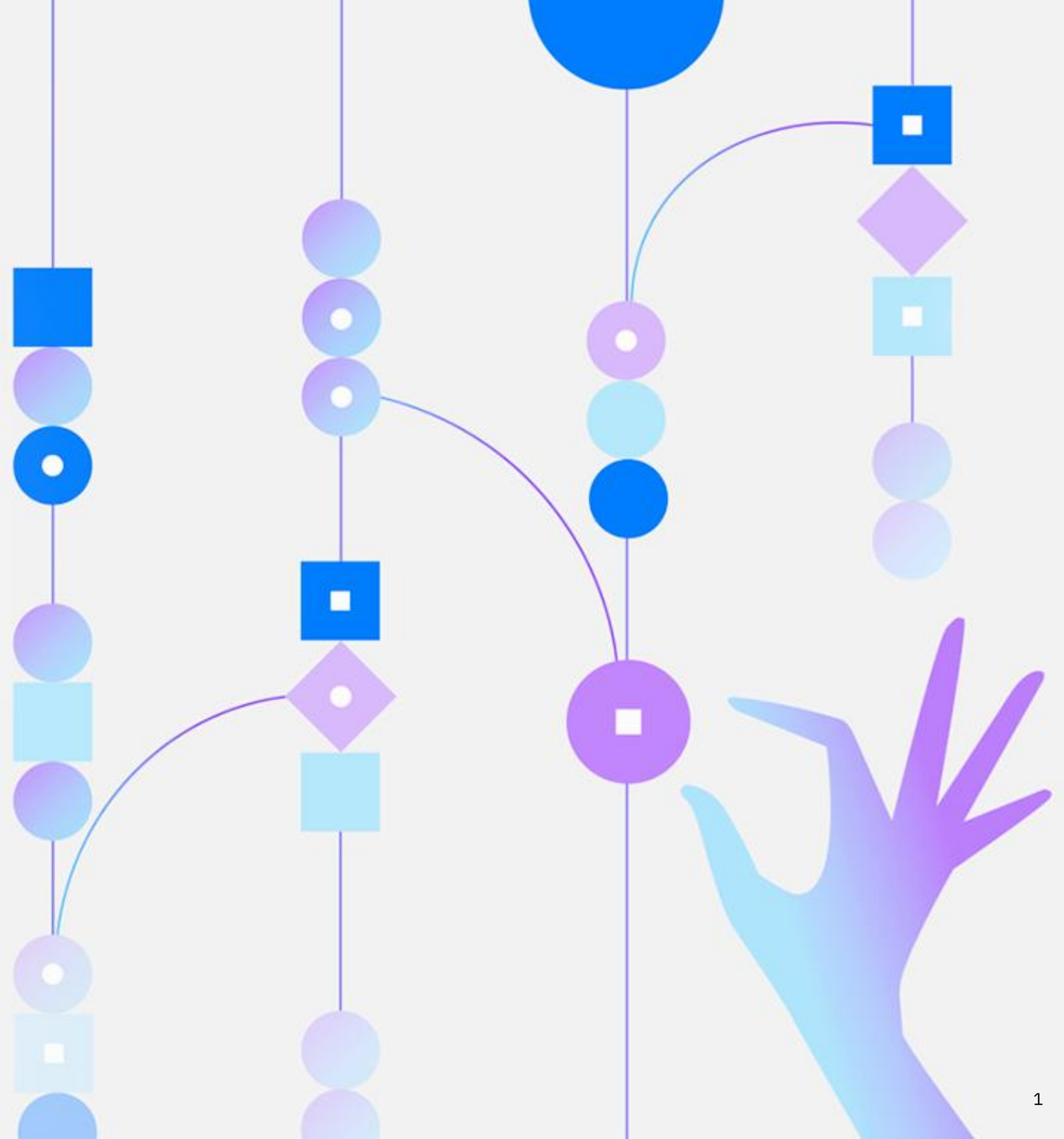
KYC-AI

Accelerate KYx
(Customer, Vendor, Counterparty)
investigation and reduce operational costs

IBM Consulting, June 2025



The case for change in Third-Party Risk Assessment and Due Diligence

The Challenges | Hurdles in Corporate KYx Operations

High Manual Review and Exception Handling

Rule-based engines lack adaptability and require manual intervention. Analysts spend excessive time validating discrepancies and resolving document issues.

Lack of Intelligence and Learning

Traditional systems do not learn from past cases. Minimal use of AI/ML for dynamic risk scoring, behavior prediction or intelligent recommendations.

Time Consuming EDD for High Risk Entities

Enhanced due diligence involves deep research. Lack of automated link analysis and poor graph data tools make this process slow and error-prone.

The Impact | Slow process, high cost, Poor CX

30-50 Days

Average onboarding time for corporate clients (target 1-2 weeks)

Due to manual document validation, fragmented system and complex tracing.

Operational Cost

Due to lack of automation, manual EDD steps, repetitive tasks, document quality issues.

Compliance Risk and Cost

Driven by poor audit trails, inconsistent risk rating updates, missed red flags due to fragmented tech.

The Need | AI-powered KYx process to transform high-cost, high-risk verification and due diligence flows across customers, suppliers, vendors, partners, and employees.

Agentic AI for self adaptive workflows

1. Agentic AI automates navigating disconnected systems to verify customers, suppliers, and vendors instantly

Value: Reduce operational costs by eliminating time wasted by analysts.

Guarantee Consistency

2. A single AI agent applies policy rules uniformly across all entity types, removing the variability and risk of human interpretation.

Value: Mitigate compliance failures, reducing the reputational risk

Automate Repetitive Work

3. AI agents handle redundant data entry with perfect accuracy, freeing human analysts to focus on critical, high-value tasks.

Value: Boosts operational efficiency and eliminates costly human errors.

KYC-AI

An advanced Agentic AI accelerator to scale your compliance

IBM’s Agentic AI streamlines third-party compliance across customers, vendors, suppliers, partners and employees with a smarter, more transparent, and user-centric approach to due diligence.

App Overview

KYx-AI is IBM's next-generation platform transforming Know Your X (KYx) operations — including KYC, KYV, KYS, KYP, and KYE compliance workflows. Generative AI and autonomous Multi-Agent Systems, the platform automates over 50% of traditionally manual tasks — onboarding, risk reviews and lifecycle monitoring for third parties.

Seamlessly integrating with existing systems, KYx-AI transforms compliance workflows into fast, accurate, and continuously improving processes. The result? Faster decisions, lower costs, and a smarter compliance engine — all with human oversight built-in.

Use Cases

- **Supplier& Vendor Vetting**
- **Energy Trading & Risk Management**
- **Partner & Employee Screening**
- **Customer & Investor Onboarding**
- **Lifecycle Monitoring & Risk Scoring**

Capabilities

Agentic AI System
State-of-the-art AI systems to produce high-quality reports

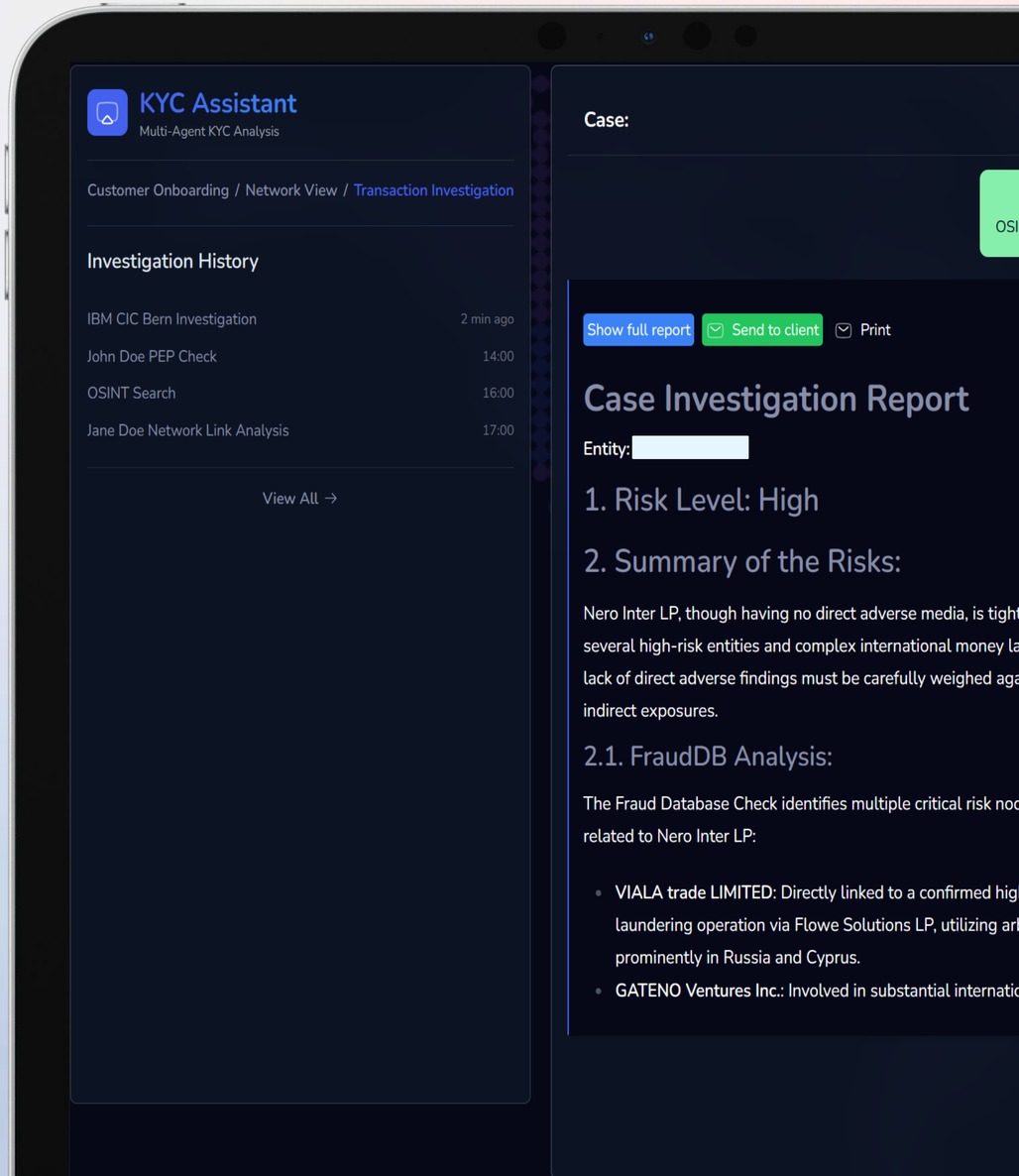
Plug-In Capabilities
Integrate with case management, transaction monitoring, onboarding

Advanced RAG
System autonomously determines relevant contents from all inputs

Versatile AI Model Integrations
runs with watsonx.ai, AWS, Azure, Hugging Face, etc.

Customizability
every individual aspect of the application can be customized

Security, Compliance & Privacy
solution provides enterprise-grade security, privacy & compliance



KYC-AI

AI-Led Business Value Across Third Parties

Our AI platform automates KYx and compliance, accelerating third-party onboarding and ensuring continuous due diligence while significantly reducing costs.

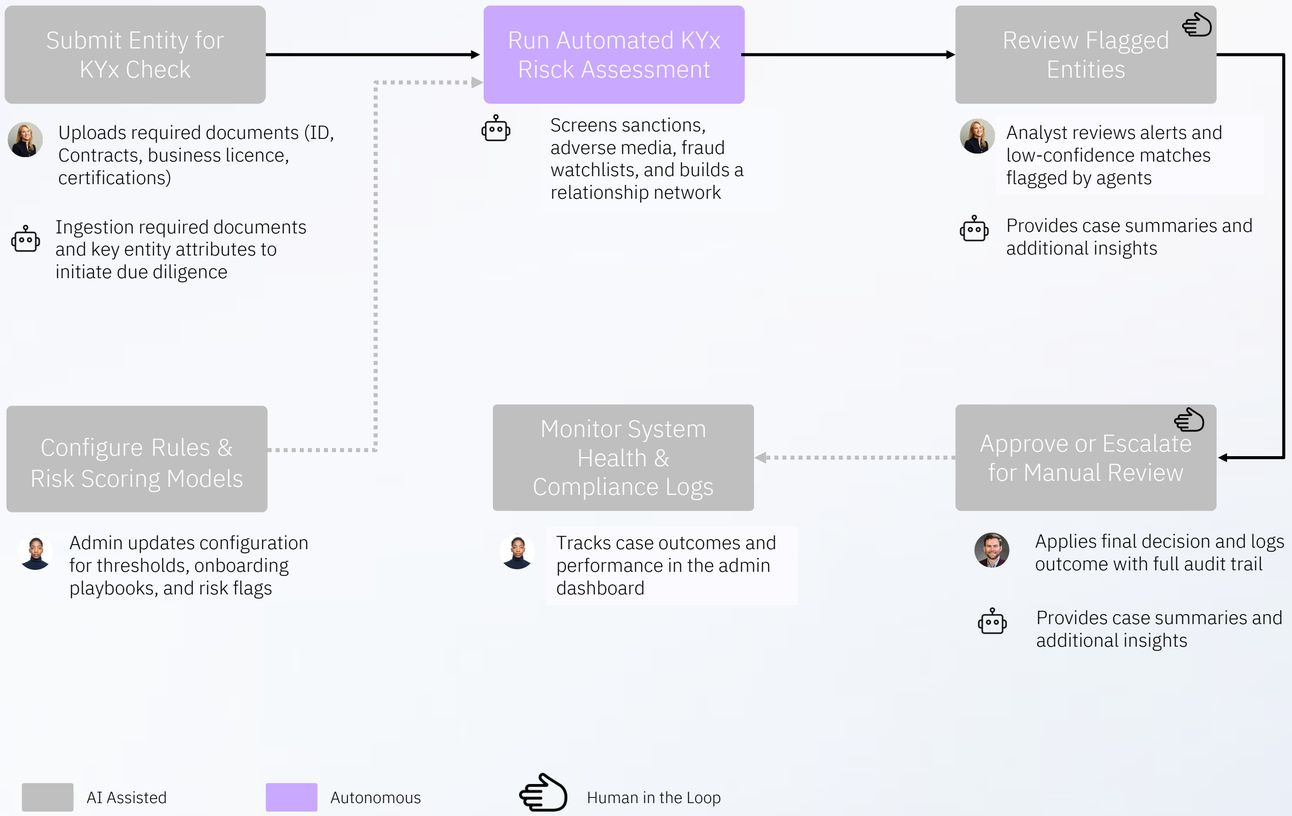
Personas

Daniel
Risk & Controls SME

AVA
Third-Party Risk Analyst

Priya
KYx Platform Admin

Workflow



Benefits & Value

60-80%	Reduction in time spent on manual KYx reviews
50%+	Increase in analyst productivity, review and decisioning speed
90%+	Coverage in sanctions, adverse media, and PEP detection

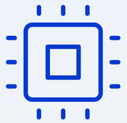
Accelerate KYx
Speed up onboarding with AI-driven automation.

Continuous Monitoring + Due Diligence
Ensure long-term compliance with proactive case mgmt.

Unwrap Entity Relationship
Reveal hidden connections between entities and counterparties, suppliers and partners.

** This journey is illustrative, and will vary based on the client's specific requirement*

Features and Innovations



Accelerate Compliance with Confidence

KYx-AI reduces onboarding and due diligence timelines across third-party relationships — including customers, suppliers, vendors, partners, and employees — by automating up to 80% of routine checks using intelligent agents.

Reveal Hidden Risks and Relationships

Surface complex third-party networks and detect links to fraudulent actors, disqualified vendors, shell entities, or sanctioned individuals using advanced network enrichment, OSINT scans, and continuous compliance monitoring.

Adaptable, Scalable, Cloud-Ready

Deploy across any cloud provider with seamless integration into onboarding, supplier management, workforce risk systems, and case monitoring tools. Fully customizable to enterprise policies and data models.

Automate with Oversight

Ensure accuracy, explainability, and auditability through a human-in-the-loop workflow, customizable playbooks, and traceable agentic investigations.

Reduce Cost and Compliance Risk

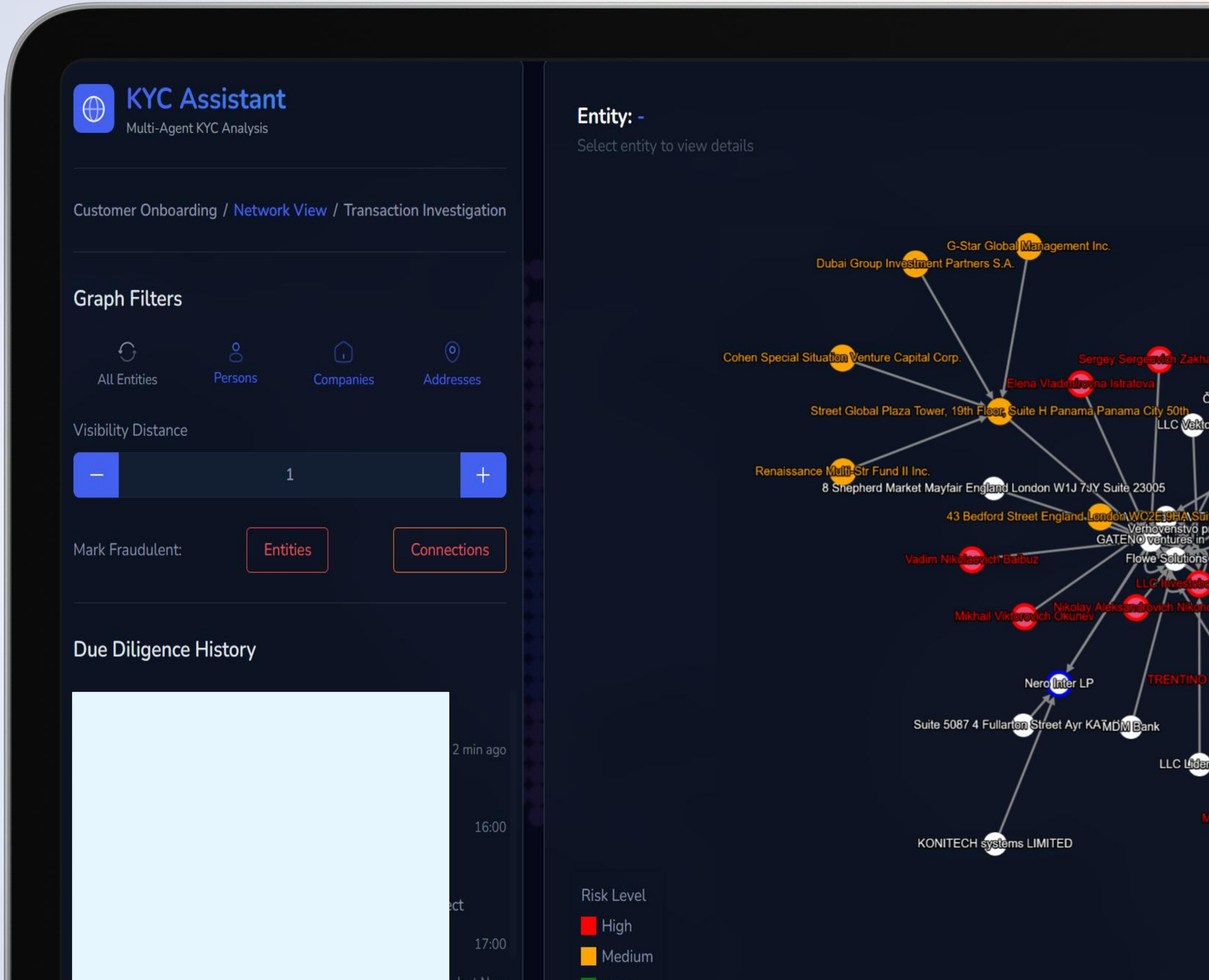
Minimize manual effort, reduce compliance headcount strain, and cut costs linked to slow onboarding, fragmented third-party data, and regulatory exposure..

KYC-AI

5 Key Features

KYx-AI delivers a powerful set of features purpose-built to accelerate, automate, and strengthen compliance across all third-party relationships.

- Multi-Agent Orchestration for Compliance
- Graph-Based Risk Detection and Network Analysis –including relationship mapping for customers, suppliers, partner and employees
- Due Diligence Timeline and Case History – Track case progress, decisions, and escalations across all third-party types.
- Interactive Case & Document Intelligence
- AI-Driven Document Processing



AI App for Banking Operation

Problem

When onboarding is delayed by incomplete data and missing documentation – it impacts everyone in the process:

Tina is the FA impacted by
↑ **time to revenue**

Sam is the analyst impacted by
↓ **experience**

Grace is the customer impacted by ↓ **experience**

Jennifer is the team lead impacted with ↓ **quality**

IBM Solution

The AI Branch Assistant Validation does a preliminary check of the account information

Client Information

- Supporting documents
- EDD questionnaire

Firm Documentation

- KYC standards
- Country risk ratings
- EDD processing guidelines

Real-Time Feedback

- Missing documents
- Additional required information
- Unique scenarios

The FA gets real-time insights on what to address with the customer prior to submittal

Grace is the customer who wants to open an account with the financial institution

Tina is the FA working with Grace to open the account

If approximately half of the ‘return-to-front office’ files are avoided

50% ↓

Months to disposition

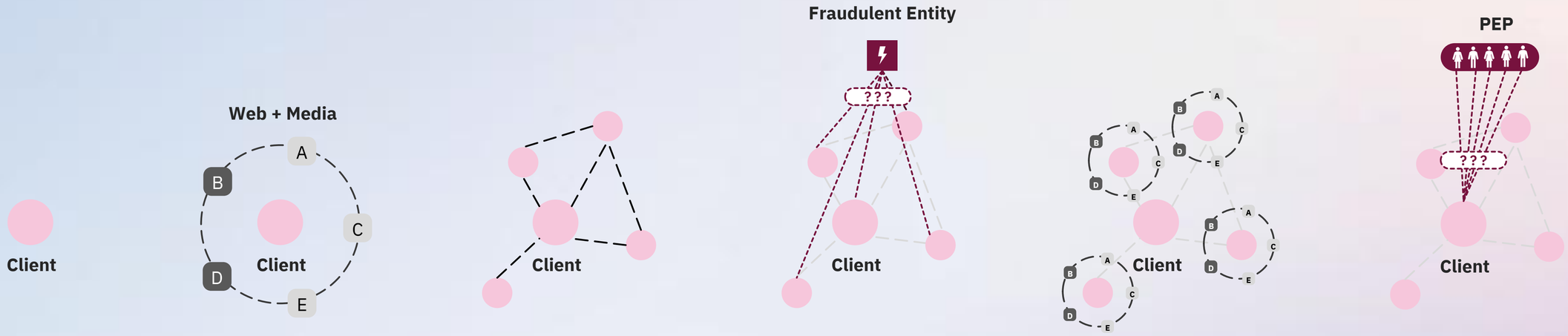
20-30% ↓

Rework reduction

~1 ↓

AML Review Touchpoints

IBM’s Agentic KYC Solution | Underlying Capabilities



Docs → 1 → 2 → 3 → 4 → 5 → Report

Onboarding
Document Upload (password, TINs) to run customer verification

Online Media Scan
Screen via Open-Source Intelligence (OSINT) + dedicated APIs on online content

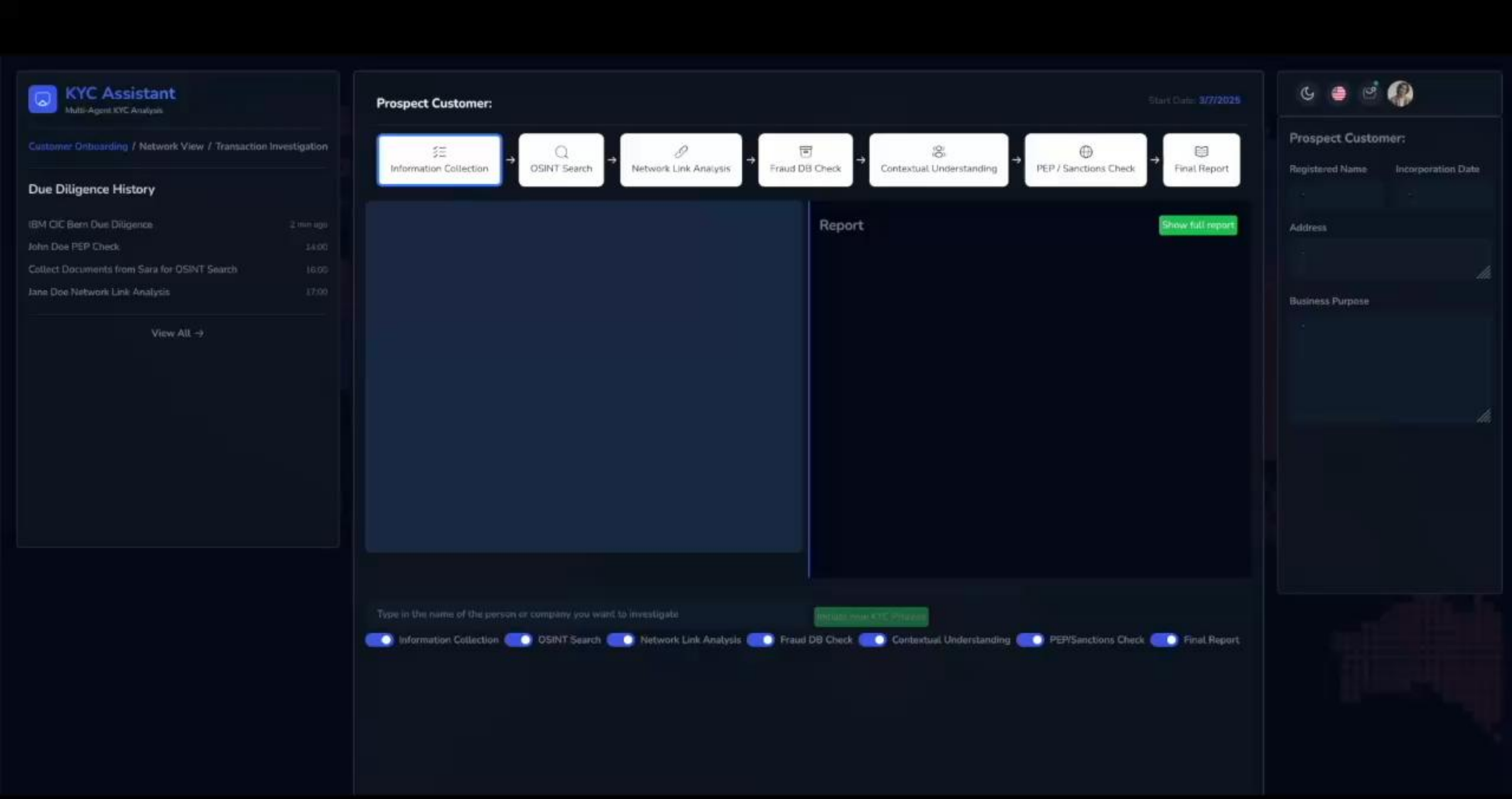
Network Enrichment
identify network connections to key legal entities and natural persons (entity resolution,KN-Graph)

Fraudulent Connections
analyze whether network is connected to known fraudulent entities in past (e.g. Panama papers)

Understand Network
Update the knowledge graph with media scan across all network nodes in the graph

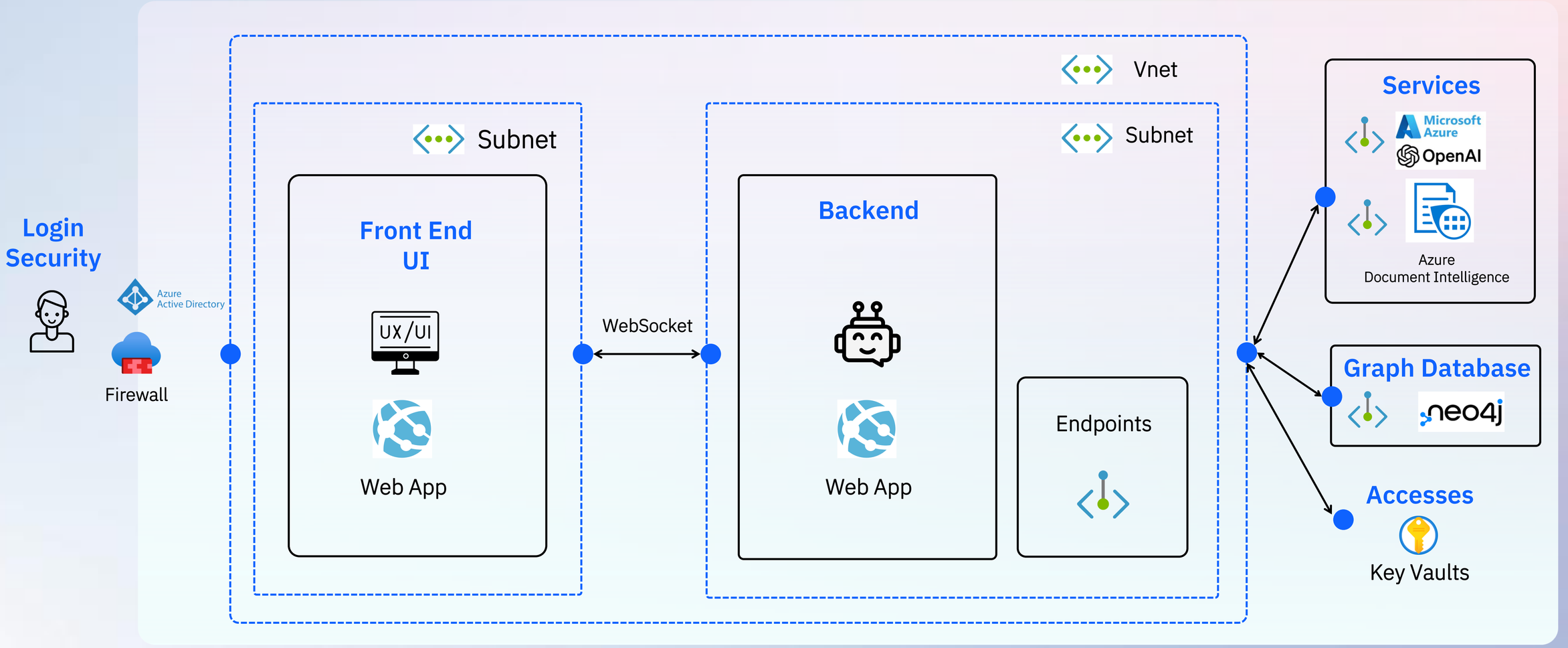
PEP Exposure
Scans various sanctions lists to identify politically exposed persons, algorithms for name/list screening

Human-in-the-loop at every Steps
Full traceability of agent investigations


KYC Assistant
Multi-Agent KYC Analysis
Customer Onboarding / Network View / Transaction Investigation
Due Diligence History
IBM CIC Bern Due Diligence
2 min ago
John Doe PEP Check
14:00
Collect Documents from Sara for OSINT Search
16:00
Jane Doe Network Link Analysis
17:00
View All →
Prospect Customer:
Start Date: 3/7/2025
Information Collection
OSINT Search
Network Link Analysis
Fraud DB Check
Contextual Understanding
PEP / Sanctions Check
Final Report
Report
Show full report
Type in the name of the person or company you want to investigate
Information Collection
OSINT Search
Network Link Analysis
Fraud DB Check
Contextual Understanding
PEP/Sanctions Check
Final Report
Prospect Customer:
Registered Name
Incorporation Date
Address
Business Purpose

Architecture

Our solution can be onboarded within any Cloud provider in a Scalable, Secure and compliant fashion.



Indicative Delivery Timeline

1 to 3 weeks		8 weeks				
Assessment	**Blueprint**	**Build**				
		Setup Sprint	**Dev Sprint**	**Dev Sprint**	**Dev Sprint**	**Test Sprint**
▪ Confirm Sponsoring Organization, Key Users Mapping ▪ Baseline business processes for transformation ▪ Identify Strategic & Ops KPIs against specific goals ▪ Identification of associated AI Risks and their impact on the use case	▪ Define key customization aspects, upstream and downstream integrations, any specific functional agents, any UI customization or UI/UX integrations. ▪ Define deployment plan and number of environments (dev, test, production) ▪ Structure and plan a 8-week MVP for the prioritized features. ▪ Define test plan for 2-3 document types	▪ Deploy the Agentic App. ▪ Get access to data sources ▪ Gather initial data set ▪ Set and test with sample data	▪ Build, Test & Playback MVP: implement the business process and validate through weekly playbacks with business users ▪ Create and integrate required Data Products ▪ Test out core capabilities ▪ Test with MVP data set			▪ Train users on agentic app and required governance knowledge, refine AI Assistant-human collaboration, and start KPI tracking ▪ Prepare production deployment

Prepare for Scale

▪ Structure engagement plan for scale

GenAI Assistants, Tools, Assets

- Agentic AI Readiness Score Framework
- ICA Assistant to classify process activities
- Mapping process mining metrics to Agentic AI Readiness Scores.

- ICA Assistant to generate first mapping to agentic architecture
- Agentic app Reference architecture

- Base App deployment code and containers
- GIT Repos
- Documentation and Deployment Guide

Delivery Squad

- Delivery Executive
- Agentic AI technical Lead
- Technical Architect
- UX Designer
- Data Scientist
- AI Engineer
- Full Stack Developer
- DevOps
- Test Specialist

Assumptions and Dependencies

1 **Setup and onboarding:**
Environment access prior to project kickoff

- Asset will be deployed in one development environment and availability zone
- Azure resources provisioned
- Required knowledge store finalized

IBM development team onboarded to environment within first week of project

2 **SME time commitment:**
SME input needed:

- Data set knowledge
- As is process and expected results
- UI validation

SME feedback within three (3) business days

3 **Base deployment:**

- Will cover core base features of the app within 8-10 week MVP
- Following query types will need additional development effort
  - Tool integration like raising ticket in workflow tool like service or any other type of integration with external API
  - Hyper personalization by connecting to user data
  - Queries based structured data sources like data base
  - Complex queries which require custom calculation before responding to user question

Get in touch and find out more

KYx-AI

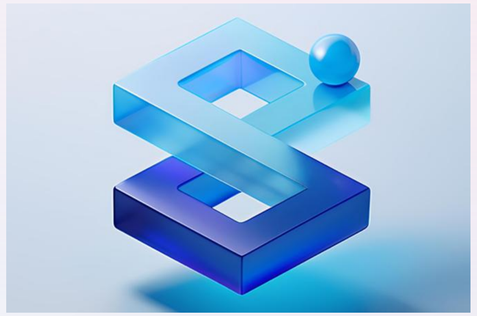
Find out more and request a demo in ICA4AA Agentic App Library

Click here

GitHub

Read more about the technical documentation in our GitHub

Click here



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