



BlackSwan Technologies

ELEMENT of Market Data™

The Challenge

Traditional centralised data integration platforms have left enterprises with several problems:

- Excessive time, effort and costs required to integrate new data sources
- Siloed data assets due to organisational politics
- Siloed data consumers and data engineers
- Lack of visibility of data consumption and operational costs
- Use of outdated data hindering enforcement and knowledge discovery
- Lack of enforcement over data usage, agreements and compliance

A Decentralised, Data Fabric approach

BlackSwan Technologies' **ELEMENT of Market Data™** challenges the traditional approach to enterprise data platforms by leveraging ELEMENT Knowledge Mesh capabilities. The capabilities include data virtualization which enables data to reside at source, across different business units, and consumed readily - by anyone with the relevant permission across the enterprise - thanks to a dynamic and intelligent data infrastructure.

BlackSwan's Knowledge Mesh is a productization of the Data Fabric concept. It can connect structured and unstructured data, as well as OSINT and public data. ELEMENT of Market Data provides market domain context and unparalleled enforcement and visibility of data consumption.

Benefits

- Single point of visibility of data flows across the enterprise
- Granularity of access controls
- Intuitive view and analysis of virtualized datasets
- Minimised data discrepancies between producers and users
- Up-to-date data enabling greater enforcement over data consumption and knowledge discovery
- Reduction in storage costs

Solution Highlights

A Data Fabric approach, providing unparalleled visibility and enforcement over data usage

Built on the award-winning ELEMENT™ AI Operating System

Enhances compliance and reduces OPEX

Winner of 2021 AI Tech Award in Big Data AI

Relied upon by leading corporations in finance and beyond

Listed in two Gartner Hype Cycles in 2021: for AI and Data Science

Features

ELEMENT of Market Data features distinctive capabilities for data acquisition, enrichment, visualisation and decision-making.

Knowledge Mesh

- Data virtualization enables data assets to be pulled from any operational source, with no need to replicate.
- Enrich entities using structured and unstructured data, metadata, OSINT and paid-for sources.
- Product catalog allows the swift maintenance of best practice values and data models of the domain, overcoming the cumbersome approach of starting from scratch and providing context.

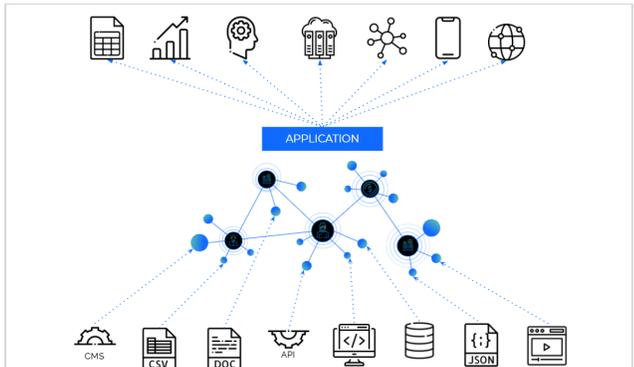
Market-Leading Entity Resolution

- Resolve entities across a multitude of systems and be alerted to any inconsistencies. Match attributes belonging to the same entity and group entities based on a state-of-the-art matching algorithm.
- Highly effective entity disambiguation enables firms to distinguish and determine the most accurate descriptive values of an entity, because of the embedded knowledge graph that relates all available data about an entity.
- BlackSwan has been highlighted by **Chartis Research**, the leading provider of research and analysis on the global market for risktech and fintech, as possessing *the* most effective entity resolution for KYC compliance.

Knowledge Discovery

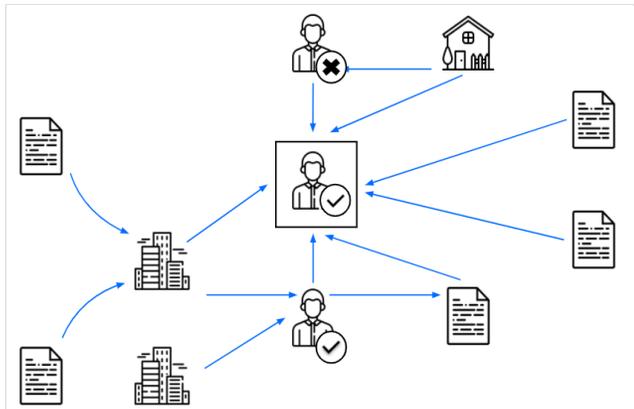
- Ability to visualise Knowledge Graph entities and relationships, build smart queries that infer complex relations between entities.
- Go beyond resolving entities; understand the network of the entity, the metadata related to an entity and the directly and indirectly-related data of an entity.
- Visualise and discover relationships and hidden patterns heaped in billions of entities, transactions, relationships and events, consolidating data fragments residing in multiple silos.
- Investigate entities for holding structure, functionaries, addresses and more.

Data Virtualization



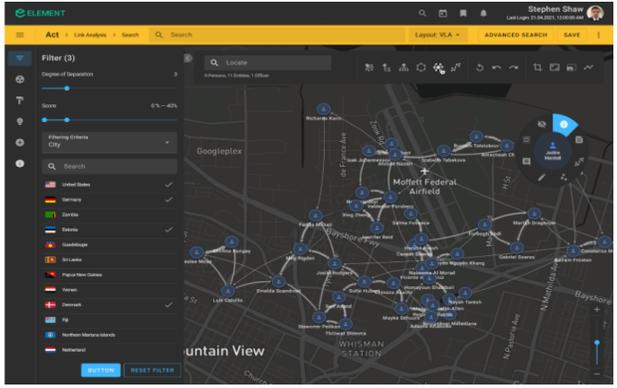
Data assets are pulled from a variety of sources, with no requirement to replicate

Entity Resolution



Use the most accurate descriptive values of an entity and match attributes belonging to the same entity

Knowledge Discovery



Visualise Knowledge Graph entities and discover relationships and hidden patterns

Additional Features

Data Quality and Governance

- Consolidation of enterprise's existing data providers, providing ease-of-access and a reduction in costs.
- Use advanced RBAC and ABAC for data sets at the most granular level - to achieve governance and adhere to regulations.
- Single point of visibility into the data consumption and utilization across the enterprise.

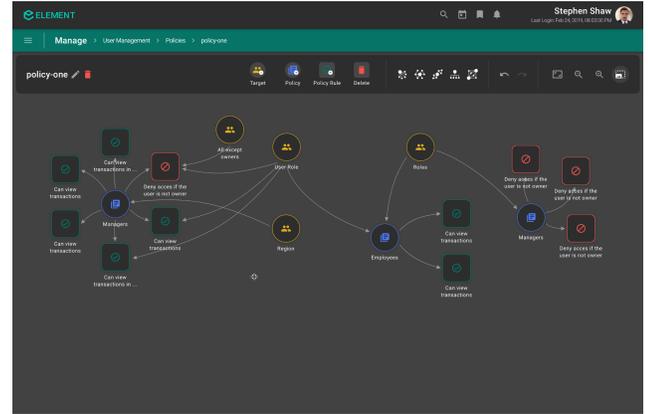
Source Management & Monitoring

- Define the means of accessing a data source and capture the credibility of each source, creating a more accurate and valuable single source of truth.
- Continuously assesses the responsiveness of the source and the quality of data. It's capable of issuing alarms and following corrective or escalation rules.
- In addition to common approaches for interacting with structured data, ELEMENT's embedded NLP, contextual analytics, and data extraction techniques, make the solution equally adept at interpreting unstructured data.

Flexible Scope and Insights

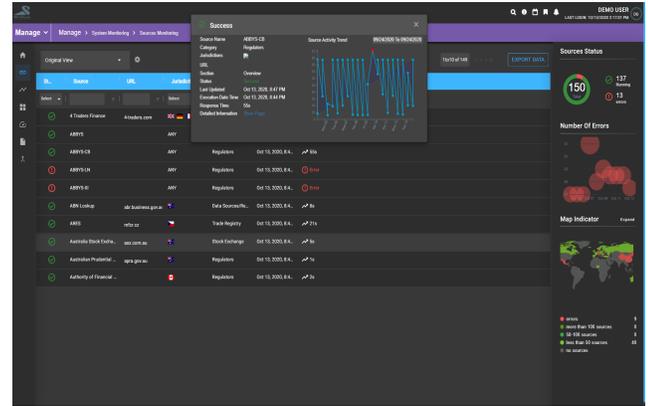
- ELEMENT of Market Data can manage the universe of data for any use case, including Customer 360 views, KYC compliance, risk management, competitive intelligence and more.
- Data Studio configures the sequence and logic for data transformation using low/no-code data pipelines. With Data Studio, it's straightforward to define numerous variations in file formats by source, including DB-to-DB connectivity, FTP, automated ordering and information extraction from documents and web pages. Data transformation activities include normalisation, harmonisation, and more.
- Insight Engine provides the ability to generate insights such as determining risk levels or customer value, in addition to acting as an enabler for investigations.

Enforce Control Decisions



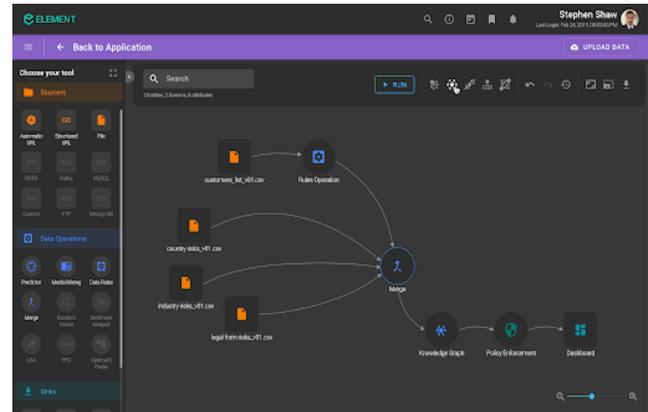
Advanced role and attribute access controls enable organisations to achieve rigorous governance

Source Monitoring



Continuous assessment of data sources ensures the most accurate and valuable single source of truth

Easily Model Data Transformations



Data Studio requires low/no-code for business analysts to visually model data transformations such as normalisation via pipelines

Client Success

Modernisation of tier 1 bank's data quality, governance and discoverability using a decentralised Data Fabric approach through the ELEMENT of Market Data application, providing unparalleled visibility and enforcement over data usage.

BACKGROUND

- Top 30 international bank with +\$2.5 trillion AUM and comparable volume of data
- Global private, corporate and institutional clients and over 50,000 employees
- Centralising data caused complexity, higher costs and inability to enforce control decisions effectively

TARGETS

- Strategic decision to enhance the data usability, security, availability, granularity and quality
- Consolidation of data sources and providers to provide single point of visibility to query all datasets
- Restrict visibility and access at a granular level, enabling better enforcement of control decisions
- Reduction of siloed data assets, harmonization of data sharing between teams
- Streamlining data ingestion and integration across the ecosystem

ADDRESSING THE NEED

- Deployed ELEMENT of Market Data's Knowledge Mesh capabilities to pull data from operational sources, with no need to replicate.
- Creation of in-time virtualized Data Lakes as needed
- Clear governance over the data consumption
- Management of internal and external data sources
- Advanced RBAC and ABAC for data sets at the finest granularity

VALUE PROPOSITION

- Provided single point of visibility into the data consumption across the enterprise
- Improved data ingestion, integration with data platforms and data access via APIs
- Reduction in discrepancies between data produced and consumed across the organisation
- Reduction in storage costs and compliance OPEX
- Strict access controls

Industry Recognition

Pioneer & Market leader

Composite AI

2021 Hype Cycle for Emerging Technologies

Gartner

AI Tech Awards Winner

Big Data & AI

Best in Big Data AI for 2021

AI Dev World

Category leader

KYC & AML Solutions

Chartis RiskTech Leaders' Quadrant 2020

Chartis
Independent. Insightful. Actionable.

Risk Technology Awards

Anti-Fraud & AML

Product of the Year 2021 for AML and Anti-Fraud

Risk.net

About BlackSwan Technologies

BlackSwan Technologies is reinventing enterprise software through Agile Intelligence for the Enterprise – a fusion of data, AI, and cloud technologies that generates billions of dollars in economic value for renowned global brands.

Global Compliance and Implementation Partners

London HQ. Offices in Tel Aviv, New York, Frankfurt, Warsaw, Sri Lanka

[Contact us to explore further:](#)

Schedule a briefing

Request a demo

Plan a proof-of-concept