BlackSwan Technologies
ELEMENT of Market Data as a Service™

The Challenge

Organizations are discovering new information opportunities – as well as challenges – when integrating market data with enterprise datasets and applications. Among the key challenges are:

- Achieving the flexibility to connect to any source as needed
- Maximizing the intelligence that is extracted from the data
- Driving down the costs of running a data integration portal
- Choosing a managed service provider that is both deeply experienced and technologically leading-edge

An Advanced Utility with Strong Governance

BlackSwan Technologies' **ELEMENT of Market Data as a Service™** is the logical solution for organisations interested in operating their data integration portal as a managed service. It combines comprehensive data management capabilities and leading AI/knowledge discovery technology, with deep domain expertise and operational excellence.

The underlying application, ELEMENT of Market Data™, fulfills the demands of data-intensive organisations. It is based on an adaptive data fabric architecture that accesses all types of data from their original sources on-demand, and allows business users to discover and apply information to applications and analytics easily, all according to clear governance policies.

Benefits

- Fast, flexible, unlimited data connectivity
- Best-in-class data accuracy and insight discovery
- Rigorous governance with continuous monitoring
- Reduction in duplicative data acquisition costs
- Elimination of CAPEX

Solution Highlights

Managed service integrating market data sources with enterprise applications and analytics

Built on the award-winning ELEMENT™ AI Operating System

Enhances data utility, operational agility, and cost savings

Application relied upon by leading corporations in finance and beyond

Winner of 2021 AI Tech Award in Big Data AI

Listed in two Gartner Hype Cycles for AI & Data Science

Application Features

This managed service offering is built on BlackSwan's application ELEMENT of Market Data, which features many distinctive capabilities for data acquisition, transformation, enrichment and knowledge discovery.

Knowledge Mesh

- Data virtualization enables data assets to be pulled from any originating source rather than replicated to the applications that consume it.
- 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.

Data Virtualization

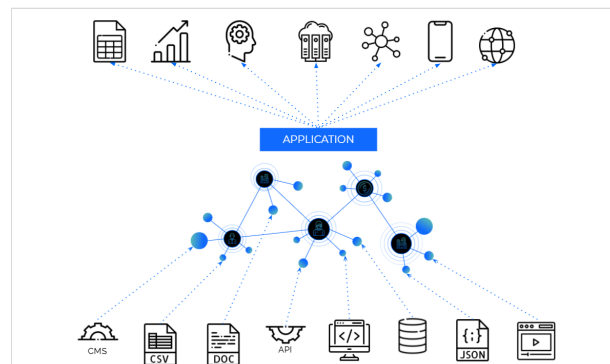Data assets are pulled from a variety of sources, with no requirement to replicate

Market-Leading Entity Resolution

- 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.
- 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.
- 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.

Entity Resolution

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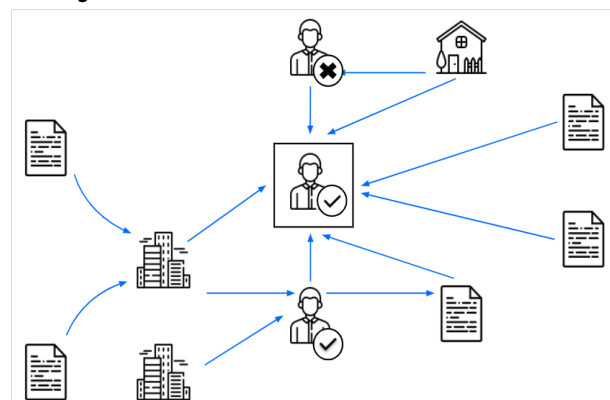
Knowledge Discovery

- 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.
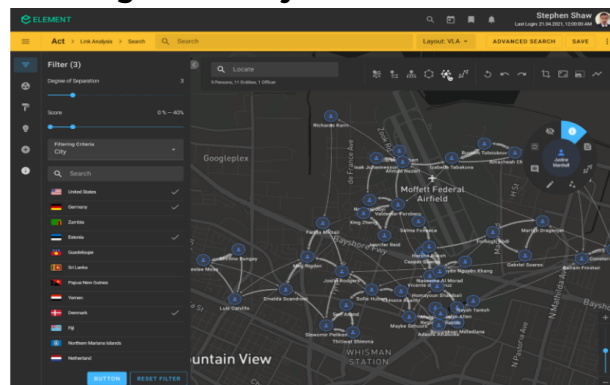- Investigate entities for holding structure, functionaries, addresses and more.

Knowledge Discovery

Visualise Knowledge Graph entities and discover relationships and hidden patterns

Additional Application Features

Data Quality and Governance

- Ability to manage multiple internal and external data sources using Source Management component
- 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 regulation
- Single point of visibility into the data consumption and utilization across the enterprise

Enforce Control Decisions

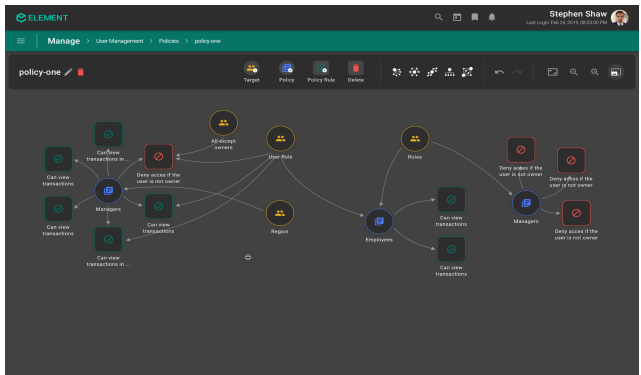Advanced role and attribute access controls enable organisations to achieve rigorous governance

Source Management & Monitoring

- Control 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.

Source Monitoring

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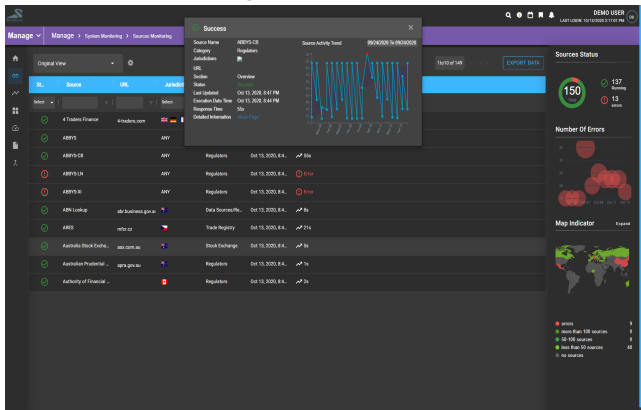
Flexible Scope and Insights

- 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.
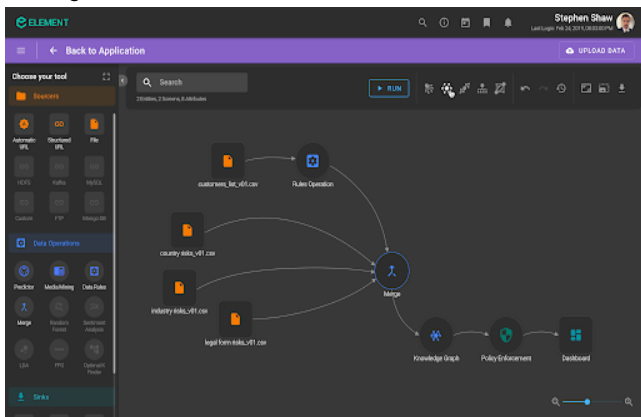
Easily Model Data Transformations

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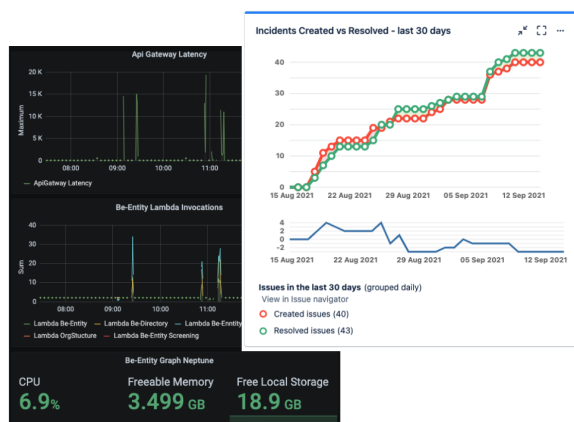
Available as a Managed Service

Outsource Operations and Reduce Costs while Retaining Oversight

For organizations interested in supporting market data management through an outsourced computing utility, ELEMENT of Market Data is available as a managed service. This offering combines all the aforementioned technology capabilities with operational best practices, a service level agreement, and a low OPEX/zero CAPEX economic model.

ELEMENT of Market Data as a Service™ is specially architected as a cost-effective, multi-tenant platform with systematic oversight. Unique provisions and benefits embodied by this MSP version of our Market Data offering include:

- Deep expertise – our operational centres attract talent focused on data management.
- Cost-effectiveness – capital & people-intensive processes are shifted to outcome-based, ongoing services.
- Acceleration – of the onboarding and modification of sources and connectivity
- Continuous monitoring – as well as maintenance and remediation of issues
- Rigorous oversight - including explicit governance and risk management procedures surrounding the service

In addition, timely, insightful management information on the health and performance of the data ecosystem, based on agreed-to KPIs, is presented in a unified dashboard.

Operational reporting includes:

- Uptimes, failover and DR scenarios
- Technical health, e.g. API response times
- Data source change alerts
- Volume of profile requests
- Event-driven data remediation activity
- KPI monitoring and alerting on, e.g., connection volumetrics,, out of date information, mapping issues
- SLA adherence
- Customisable views

Choice of Service Providers

The managed service can be provided by one of BlackSwan Technologies' global partners or by BlackSwan itself. Our partners are certified in all aspects of the ELEMENT of Market Data platform. Many specialize in enterprise data integration or by industry or geography.
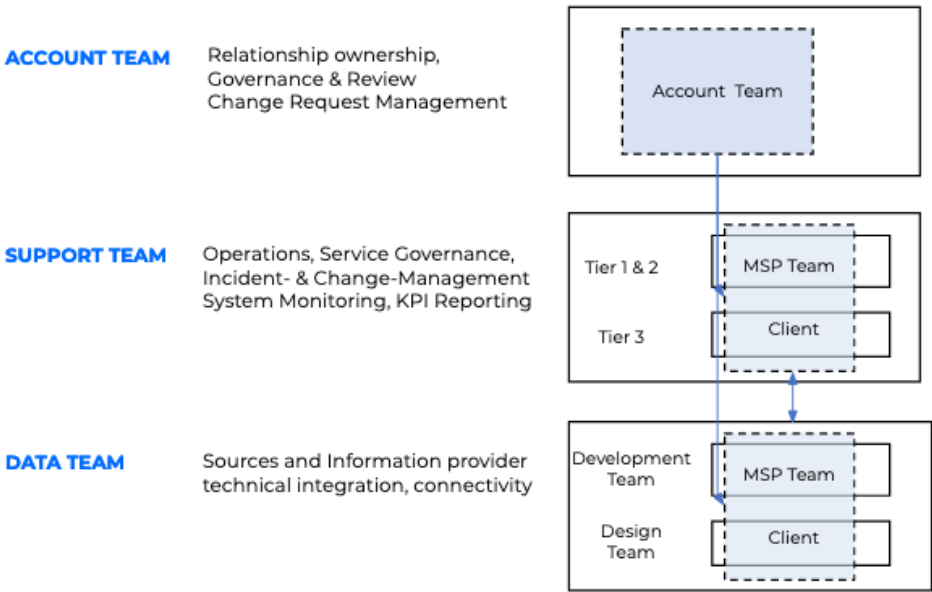
When choosing BlackSwan as your MSP, you gain access to dedicated Account and Support teams. BlackSwan possesses a highly experienced data connectivity team, which is dedicated to configuring and monitoring integrations with hundreds of business-oriented data sources. These include company profiles, trade registries, financial analyses, regulatory watchlists, businessperson profiles and more. New sources are added monthly, driven by cross-client needs.

Governance and Operational Collaboration

Achieve Strategic Goals & Seamless Operations with a Trusted Partner

As your MSP, BlackSwan Technologies also works closely with your team to integrate governance and operational best practices with your organisation's departments, policies and procedures. This helps ensure seamless operations from an IT and end-user perspective, while maintaining a focus on the strategic business impact and evolution of your enterprise data framework.

On a day-to-day basis, BlackSwan Managed Services leverages effective, efficient, shared technical and operational structures. The response units include a dedicated Account Team, a shared support escalation team, and joint data connectivity practice.

ACCOUNT TEAM — Relationship ownership, Governance & Review Change Request Management

Account Team

SUPPORT TEAM — Operations, Service Governance, Incident- & Change-Management System Monitoring, KPI Reporting

Tier 1 & 2 — MSP Team
Tier 3 — Client

DATA TEAM — Sources and Information provider technical integration, connectivity

Development Team — MSP Team
Design Team — Client

At a governance and strategic level, we offer to involve our clients in oversight structures that we have found to deliver a high degree of organisational satisfaction and business impact. These encompass all aspects of the relationship to ensure timely, considered responses.

	WHAT	WHEN
STRATEGIC LEVEL	**Client Advisory Council** · Includes clients of BST as well as partners, regulators · Communicates Product/ Solution strategy and roadmap · Takes & prioritizes input from the market	Every 12 months
	Relationship Governance Board · Covers Client-BST Relationship Status and Opportunities · Takes overarching relationship decisions	Every 6 months
OPERATIONAL LEVEL	**Operations & Projects Board** · Covers Status, Development, Issues and Opportunities within the ongoing operations and project delivery · Service Review, handles & resolves escalations · Ensures delivery / operations capacities for clients	Monthly
	Operations & Project meetings · Handle and resolve issues at project/operational level · Escalate to Operations and Projects Board if required · Ensures day to day execution for clients	Project specific

BlackSwan will adjust the above frameworks as desired to meet our clients' needs.

Client Success

A global insurer had hit a wall when it came to maintaining and expanding access to 3rd-party data for underwriting. BlackSwan's Market Data service met all their strategic requirements for an adaptable solution.

BACKGROUND
- Insurer was collecting 3rd party data from 20+ countries for underwriting analysis
- 100s of variations in data formats and integration techniques existed
- Inflexible platform was leading to slow decisions, sub-par customer interactions, and soaring OpEx

TARGETS
- Centralise an enterprise platform for 3rd party data integration
- Harmonise related data from multiple sources
- Make data availability to operational/legacy systems seamless
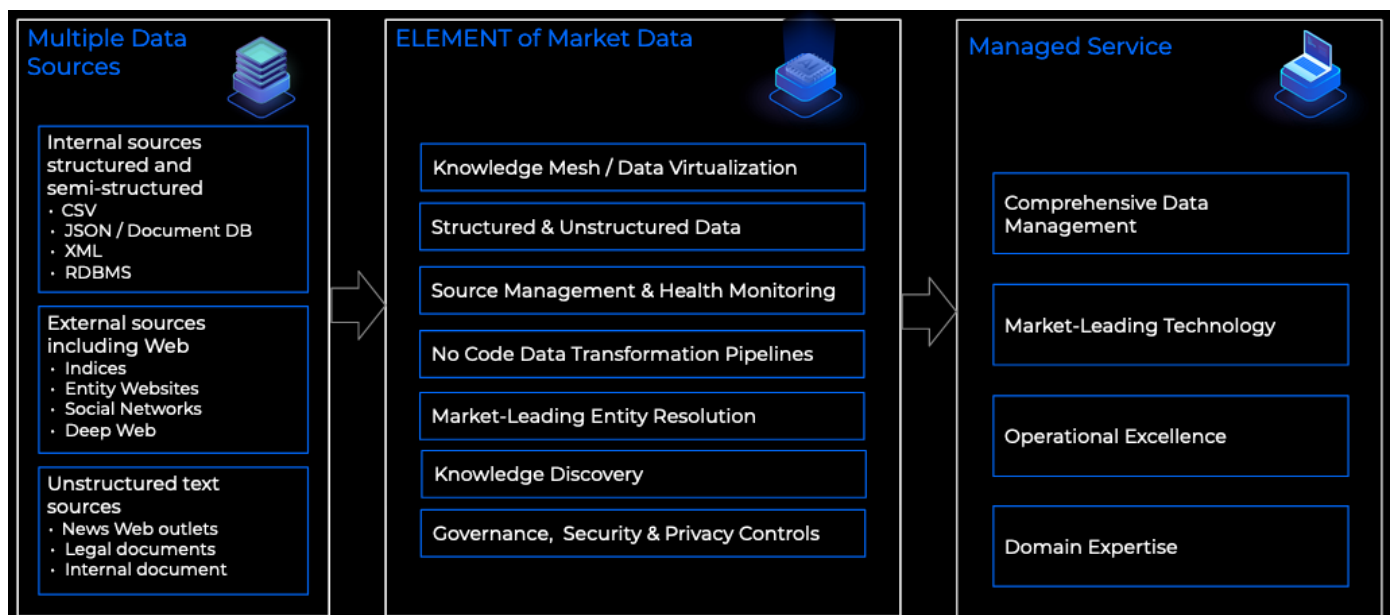- Transition to a managed service

ADDRESSING THE NEED
- Provided a comprehensive 3rd party data management platform that incorporates data source control and monitoring, ETL pipelines, business process/application orchestration; and system governance policies
- Added underwriting decision-scoring facilitation.
- Data handling included normalisation, unstructured data interpretation; entity disambiguation; information contextualisation and single source of truth
- MSP approach incorporated shared technical and operational teams for maximum responsiveness

VALUE PROPOSITIONS
- Offering representing an ideal combination of market-leading technology, native big data capabilities, operational excellence, industry experience, and unique technology
- Improving organisational agility to add, modify or swap information services
- Lowering OPEX by introducing a managed service with flexible connectivity architecture

CLIENT PLATFORM ARCHITECTURE

Industry Recognition

Pioneer and Market leader
Composite AI
2021 Hype Cycles for AI and Data Science

Gartner.

Category leader
KYC & AML Solutions
RiskTech Leaders' Quadrant 2020

Chartis
Independent. Insightful. Actionable.

AI Tech Awards Winner
Big Data & AI
Best in Big Data AI for 2021

AI Dev World

Risk Technology Awards Winner
Anti-Fraud & AML Solutions
Product of the Year 2021

Risk.net

Partners

accenture   Deloitte.   DXC.technology   <epam>   REFINITIV

KPMG   Infosys®   tcs TATA CONSULTANCY SERVICES   genpact   OLIVER WYMAN   Delta Capita

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