



BLACKSWAN TECHNOLOGIES

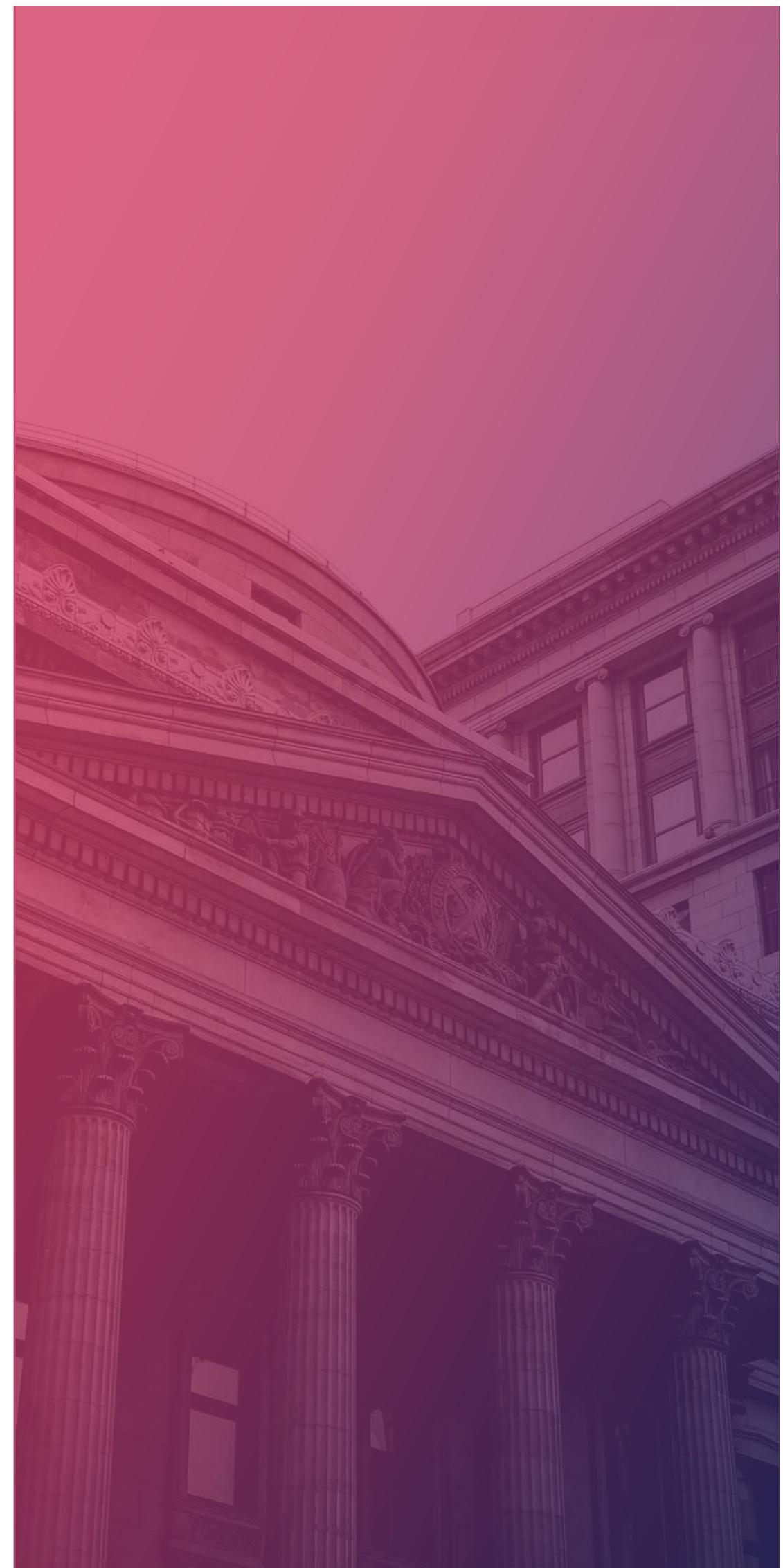
ELEMENT OF COMPLIANCE

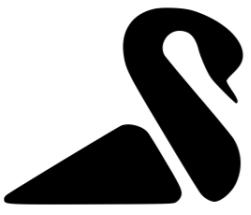
A MORE INTELLIGENT APPROACH TO ENTERPRISE COMPLIANCE MONITORING

THE CHALLENGE

In order to mitigate risks associated with money laundering and other compliance issues, financial institutions and others must increasingly monitor a range of data sources and then connect the dots in relation to their customers and partners.

For example, data gathering during the Know-Your-Customer (KYC) process and the screening of customers against structured economic sanctions watchlists and other bad-actor databases have been around for years. However, frequent screening against unstructured information including negative news (“adverse media”) to identify customers’ risk factors is emerging as a regulatory expectation. Overall, the gap is growing between what regulators expect and what is feasible using manual, resource-intensive solutions for compiling and screening compliance-relevant data.



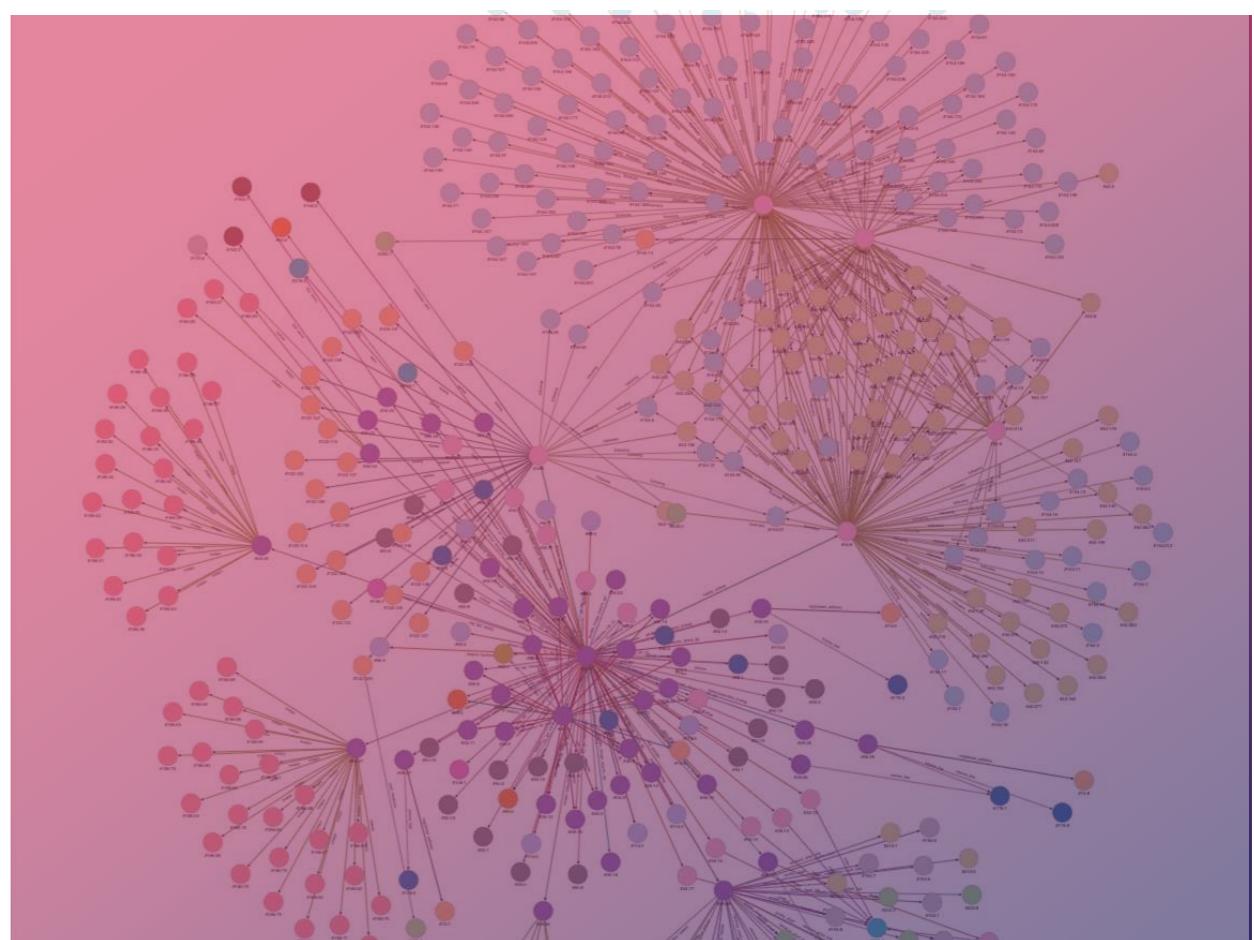


BLACKSWAN'S APPROACH TO COMPLIANCE

BlackSwan has emerged as a technological leader in the compliance space with the aim of bringing all relevant intelligence into a single, customer-centric viewpoint. While the compliance lifecycle starts with KYC when each customer is onboarded, a holistic approach requires that transactional and other relevant activity data are routinely scanned and that a customer's profile is constantly enriched with open-source data to identify emerging compliance risks.

At the heart of BlackSwan's approach to compliance is a knowledge graph that builds, in real-time, a comprehensive representation of all relevant entities and the relationships between them. As such, the vital data obtained during KYC is viewed as seed data, which is enriched using a variety of social media, global news and other unstructured sources to ensure all relevant details are included in each entity's profile. As an entity acts or new information becomes available (e.g., adverse news), the knowledge graph evolves over time to reflect the most up-to-date state of intelligence.

In order to efficiently and accurately process the universe of available data, BlackSwan uses state-of-the-art artificial intelligence (AI) algorithms to filter through millions of sources in seconds and append the structured information within the graph. Going beyond simply keyword tagging, multi-level semantic natural language processing (NLP) and deep learning (DL) methods process each source and extract the actors and context in a way that mimics analyst review. Graph computation is instantaneous, implying the information is available the moment it is needed.



BlackSwan provides a holistic representation of all intelligence that is relevant for compliance.



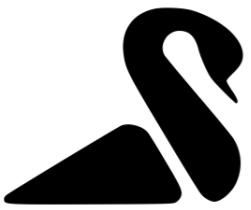
MACHINE LEARNING

State-of-the-art machine learning (ML) algorithms identify the most relevant negative news items and can assign that information to a particular compliance domain (e.g., fraud, AML, etc.).



NATURAL LANGUAGE PROCESSING & DEEP LEARNING

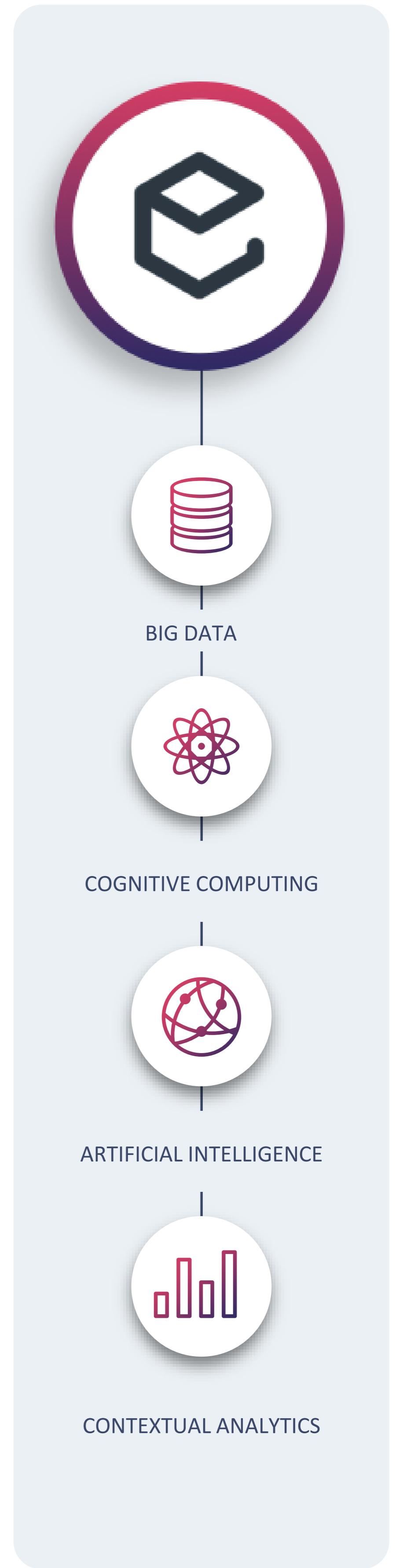
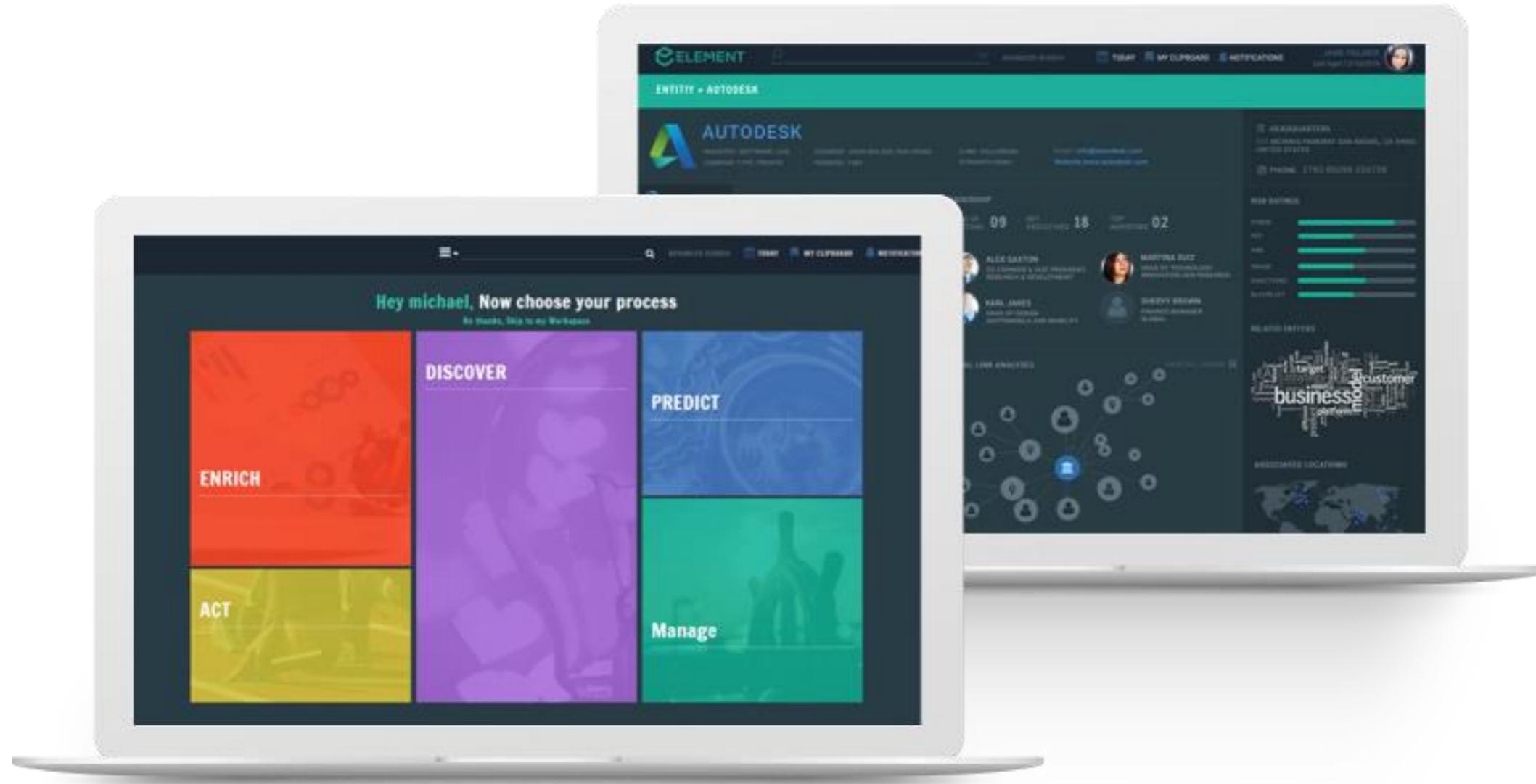
Multi-level semantic natural language processing (NLP) and deep learning (DL) algorithms break each article down to the sentence-level, resolving the nature of each entity and their respective actions.

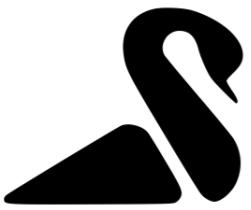


ELEMENT OF COMPLIANCE

BlackSwan's complete suite of capabilities are made available via **ELEMENT of Compliance**, our software application that sits atop the knowledge graph and integrates with existing data infrastructure and applications to provide a comprehensive solution. **ELEMENT of Compliance** is an industry- and function-specific solution that BlackSwan has created with **ELEMENT**, our Enterprise A.I. Operating System product.

The KYC module includes an adaptive elicitation procedure that ensures all required data inputs are captured during onboarding and represented within the knowledge graph, while the extensive variety of information fetchers ensure the information is always current and complete. The Transactional Intelligence layer provides context for alerted behaviors, and can integrate and ingest alerts from existing transactional monitoring tools, or a user can use the Transactional Monitoring module within **ELEMENT** to create transactional alerts that align with and surpass industry expectations. While reviewing a particular customer, an analyst can access visualizations and analyses related to temporal flow of funds, peer-group comparison, and other insights that go well beyond the simple description of the alerted behaviors.

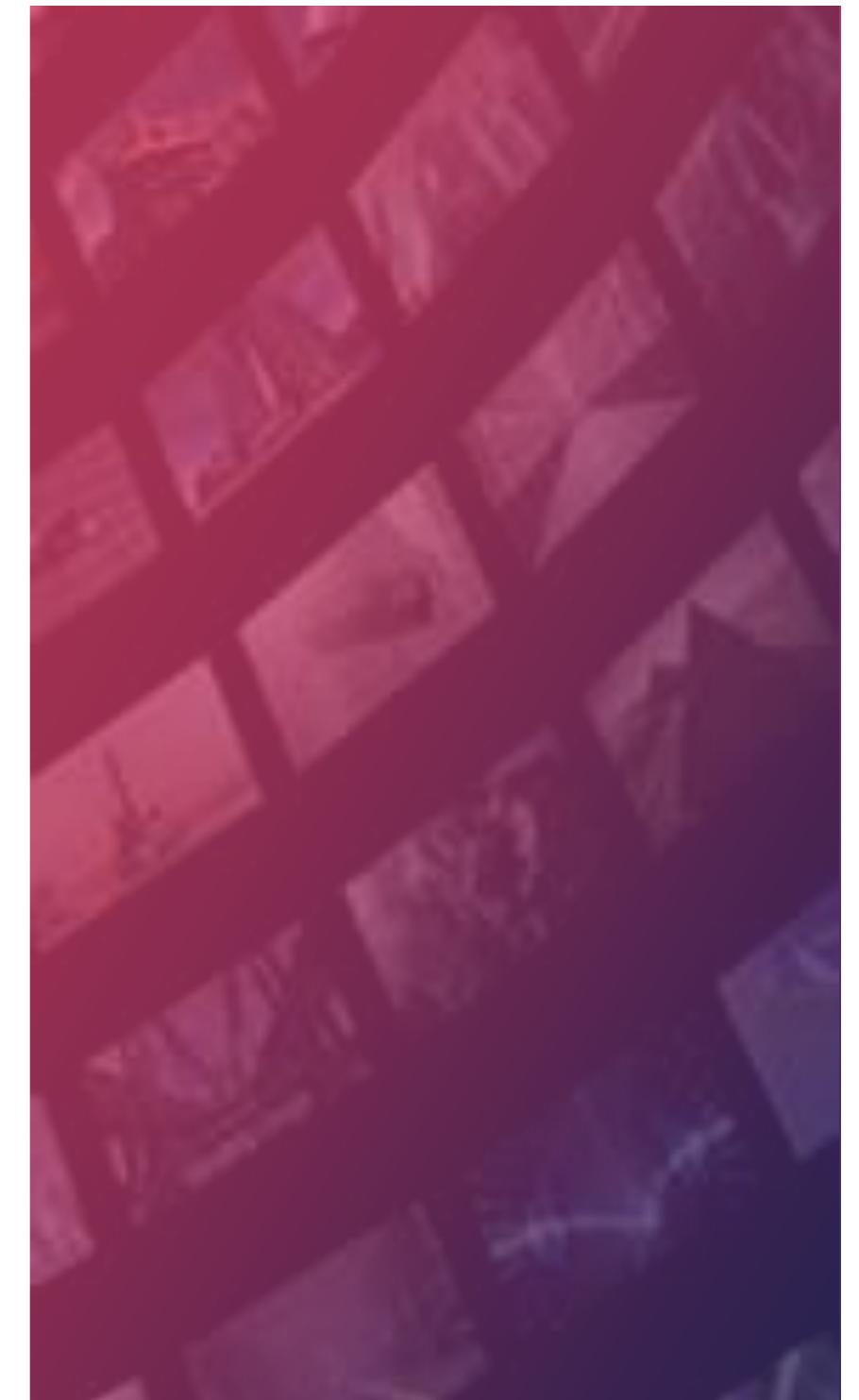




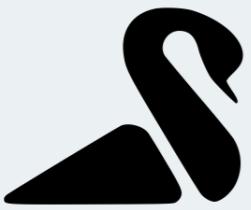
ELEMENT OF COMPLIANCE

The Transactional Intelligence layer provides a module for analyst decisioning (SAR vs. no SAR), and can pre-populate a case narrative with all the relevant statistics, figures, and findings. An analyst can simply edit the narrative before submitting, which saves time and enables standardization across analysts.

ELEMENT's artificial intelligence (AI) capabilities are available throughout the entirety of the compliance process to better identify risk and enable efficiencies. These methods can, for example, enable better detection of complex risk typologies that are not easily expressed in rule-based logic, or identify alerts that are deemed low risk and enable bulk decisioning. The benefits are measured in more accurate findings and conserved resources.



The screenshot on the left shows a detailed narrative text about JHO Low's actions regarding 1MDB funds. The text discusses how Low provided Coutts with an investment management agreement as evidence that Good Star was a fund manager tasked to invest the money on 1MDB's behalf. It mentions that Low later provided Coutts with a loan agreement, which characterised the money as a loan from 1MDB. The text also notes that according to the statement of facts by the Attorney-General's Chambers, the public prosecutors knew where the money for Good Star was coming from and that Low knew about it all along. The agreements provided to Coutts are inconsistent with each other, and both are also inconsistent with the explanation for the transaction given by Tang Keng Chee to Deutsche Bank Malaysia. The date Sept 30 2009 is mentioned. The screenshot on the right shows a transaction graph for PETROSAUDI. The graph displays various entities as nodes, including James Lee, Casey Tang, and Deutsche Bank. The graph illustrates complex relationships and transactions between these entities, likely related to the 1MDB funds mentioned in the narrative text.



ABOUT ELEMENT

ELEMENT is Enterprise Artificial Intelligence Operating System to develop Enterprise AI driven applications centered on the concept of augmented human intelligence. Essentially ELEMENT is the foundation that can be used by enterprises across multiple industries to build robust AI applications & tools that would allow to better collect and organize the necessary information, gain competitive intelligence, improve accountability and compliance, drive new business opportunities and increase the predicting power – all while cutting costs, reducing errors and eliminating waste in a minimal time and effort

- The world first enterprise AI Operating System for the manifestation of data intensive enterprise business applications for operational efficiencies and advanced decisioning
- Multipurpose platform that comes at a significantly lower cost of ownership as compared to the alternatives
- Unique IP and competitive advantage in Cognitive Services, UI, Specific Domain Applications, Data / Knowledge Management and Infrastructure Services
- Bridges the massive gap between isolated, sporadic, expensive Data Science projects to business production with limited time, cost and code.

The system design to operationally serve the spine of any data intensive organization including

- DBAs
- Data Engineers
- Knowledge Workers
- Data Scientists
- Business Analysts
- Business Users
- Executives

Also available are business applications built on **ELEMENT**, which are ready-to-deploy in particular industries and business functions. These include **ELEMENT of Insurance** for insurance carriers, with a focus on underwriting and its coordination with other business functions, as well as applications for marketing, talent acquisition, market intelligence and forensic accounting. This pre-built application approach delivers Cognitive Computing Out of the Box™.

ABOUT BLACKSWAN TECHNOLOGIES

BlackSwan Technologies was founded on the vision that vast, varied data is now accessible to enterprises but is broadly under-utilised. Cognitive computing capabilities can be applied to transform that data into insights that revolutionize your ability to serve customers, improve operations, and redefine market leadership. Introducing the Intelligence of Everything™.

At BlackSwan, a team of more than 40 data science, software development and delivery specialists advances the state of the art in augmented intelligence for businesses – working side-by-side with our clients. Our unique intellectual property spans cognitive services and their industry-specific applications, user interfaces, big data and technology infrastructure management. We have been highlighted in KPMG/H2 Ventures' rankings as a rising star in our field.

BlackSwan serves enterprise-level organisations worldwide, both directly and through an expanding set of blue-chip delivery and consulting partners. The company maintains a primary presence in Europe, the US, Israel and India.