

BLACKSWAN TECHNOLOGIES.

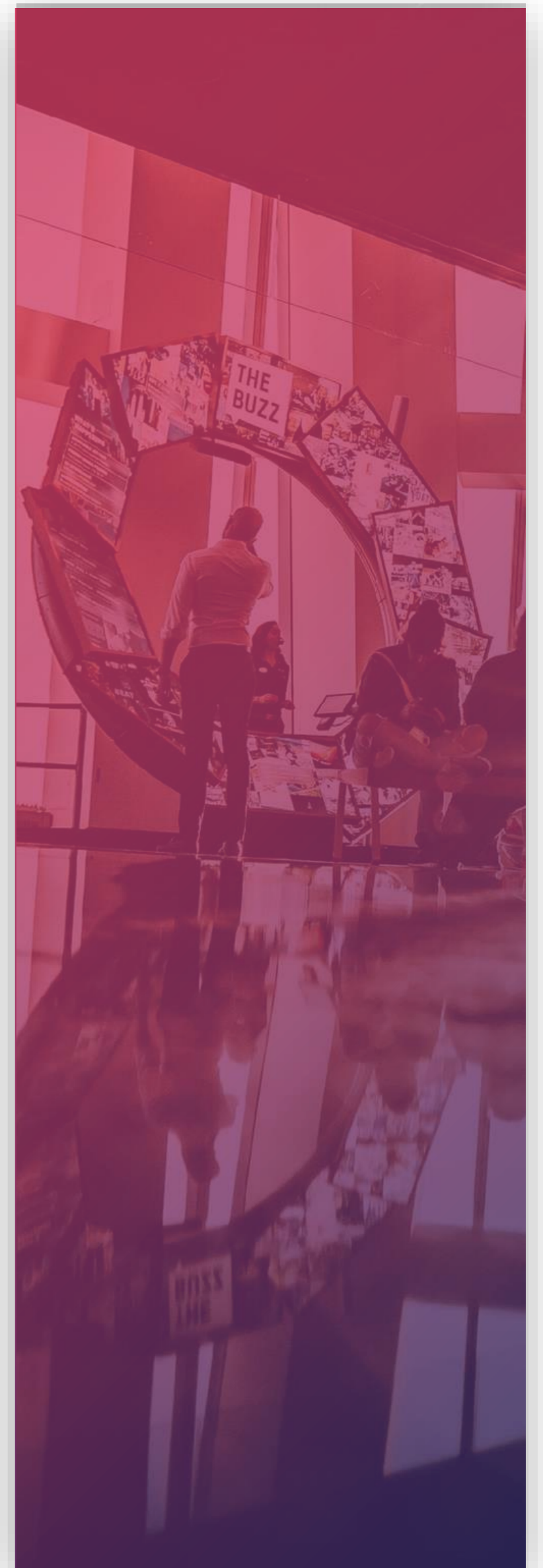
ELEMENT

The world's first Enterprise A.I. Operating System,
from BlackSwan Technologies

Fully Utilise Data to Extract Key Business Insights

Data is the new natural resource of the world, enabling quick development of a competitive edge. While available data grows massively in volume and at an increased velocity, 80% of data available to organizations goes unexploited. Studies that have found that those using data most effectively can gain up to 1,300% in ROI.

BlackSwan Technologies' ELEMENT™ challenges the conventions of transforming data into knowledge, automatically combining all available sources of information with Cognitive Computing capabilities to infer insights and enhance the decision-making abilities of your enterprise. Blending an array of intelligence-centric analytics and insight discovery capabilities with easy-to-integrate data and business logic layers, ELEMENT delivers eye-catching ROI right out of the box and at the lowest cost of ownership compared to alternative A.I. solutions.





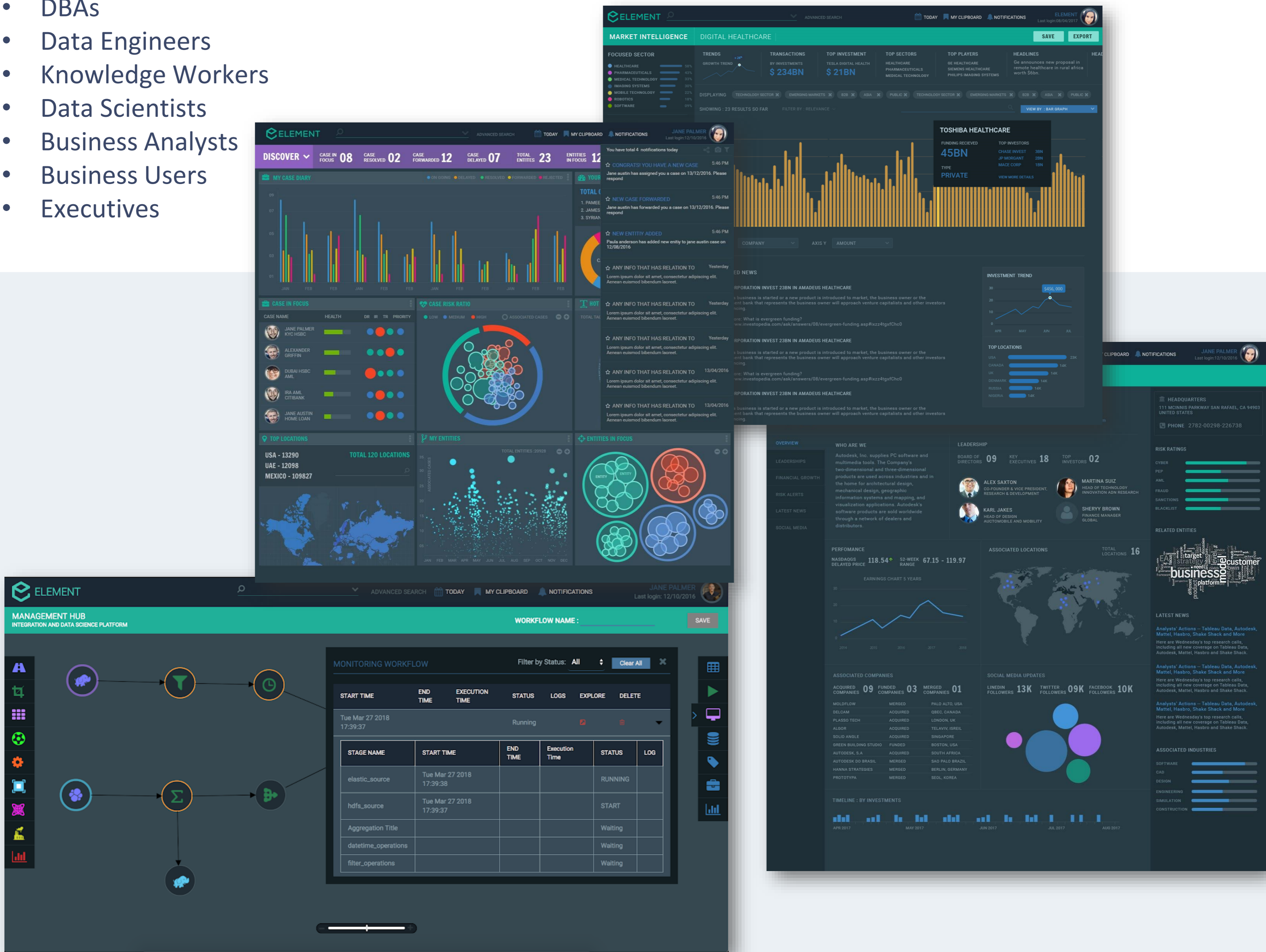
An Enterprise A.I. Operating System

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

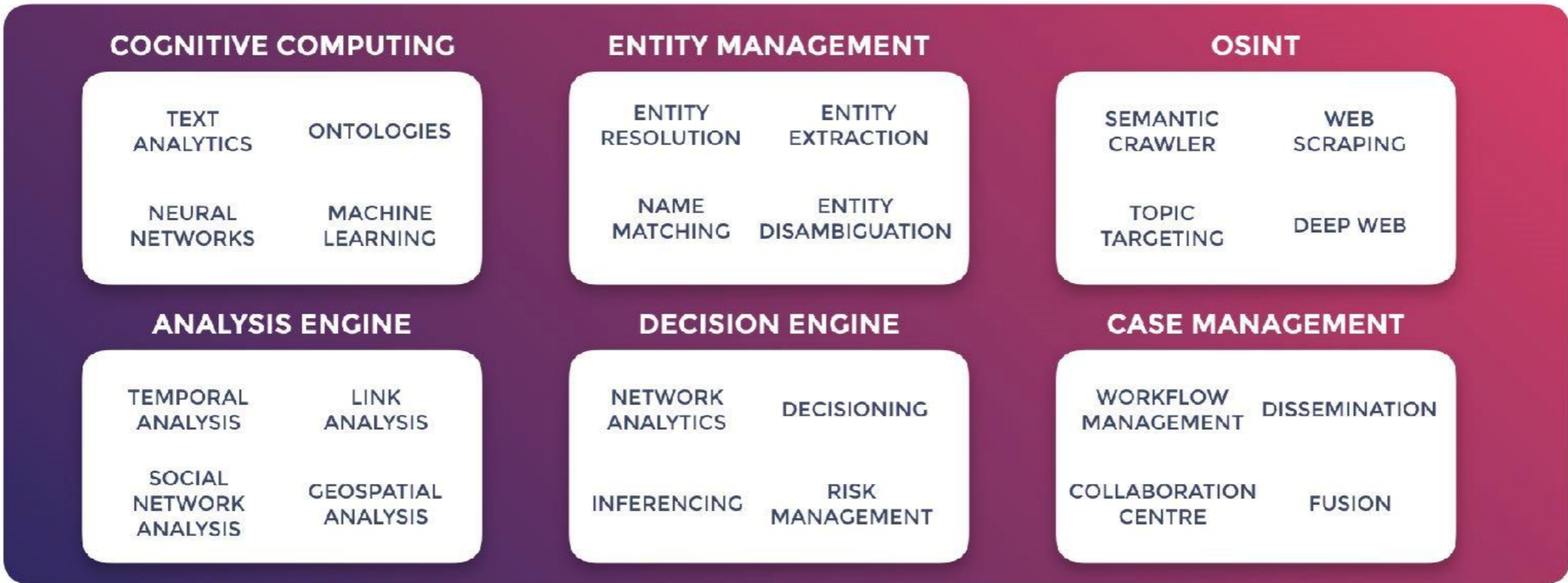




An Enterprise A.I. Operating System

ELEMENT is the world’s first Enterprise A.I. Operating System. It incorporates an array of best-in-class technologies in information search, big data, artificial intelligence, cognitive computing and contextual analytics. Capabilities include a topic-customisable search engine, web crawlers and scraping, neural networks and machine/deep learning, natural language processing and chatbots, entity extraction and knowledge graphs, relationship networks/graph computation, data visualization, predictive analytics, hypothesis testing and more. Add to this an interface that is intuitive for business staff to explore and act on “cases” stemming from the findings.

A COMPREHENSIVE COGNITIVE COMPUTING AND DECISIONING ENVIRONMENT



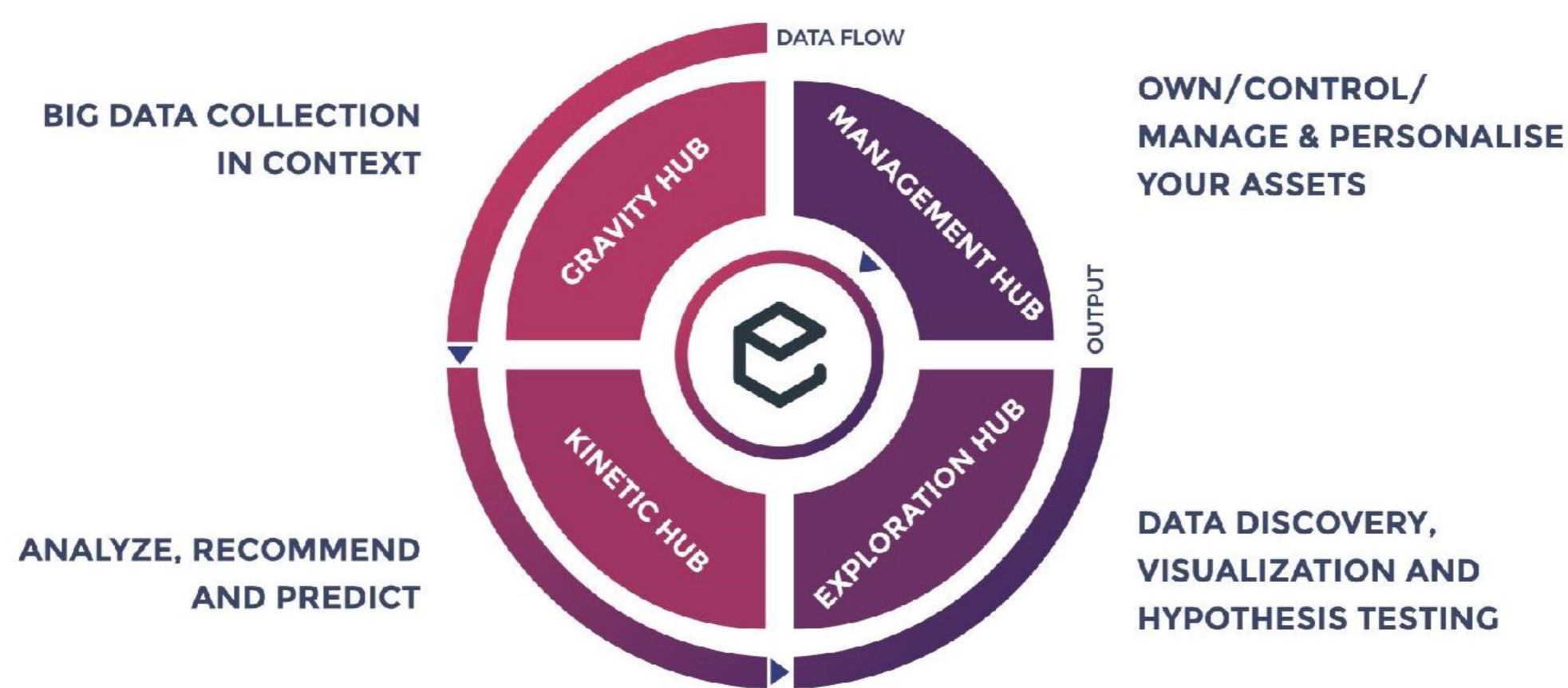
The capabilities can be combined to perform an unlimited range of tasks that address your most critical business challenges. Begin applying **ELEMENT** to one focused set of business requirements, then expand over time to deliver augmented intelligence support to your entire organization. **ELEMENT** thrives in business environments where industry-specific expertise and sophisticated business processes must be supported.





Four Hubs Generate Deep Comprehension and Actionable Insights

ELEMENT is comprised of four modules, or “hubs,” which process data, automatically form situational comprehension, share insights with business users for exploration and action, and control and configure the entire system. The four hubs complement each other, creating true comprehension within the application and insights within your organisation.



GRAVITY HUB

Process Data in Motion

Much like the human primitive brain, **ELEMENT**’s Gravity Hub is tasked with gathering information, interpreting it, and remaining constantly alert to basic needs.

COGNITIVE HUB

Build Situational Understanding

The Cognitive Hub continuously monitors ingested information in order to enrich its knowledge, identify impact on its semantic networks, and detect potential business implications.

EXPLORATION HUB

Augment Your Organisation’s Intelligence through Insight and Interaction

The Exploration Hub focuses on the interaction of business analysts with the understanding and insights formed by the software.

MANAGEMENT HUB

Centrally Configure Your Deployment for Ultimate Control and Flexibility

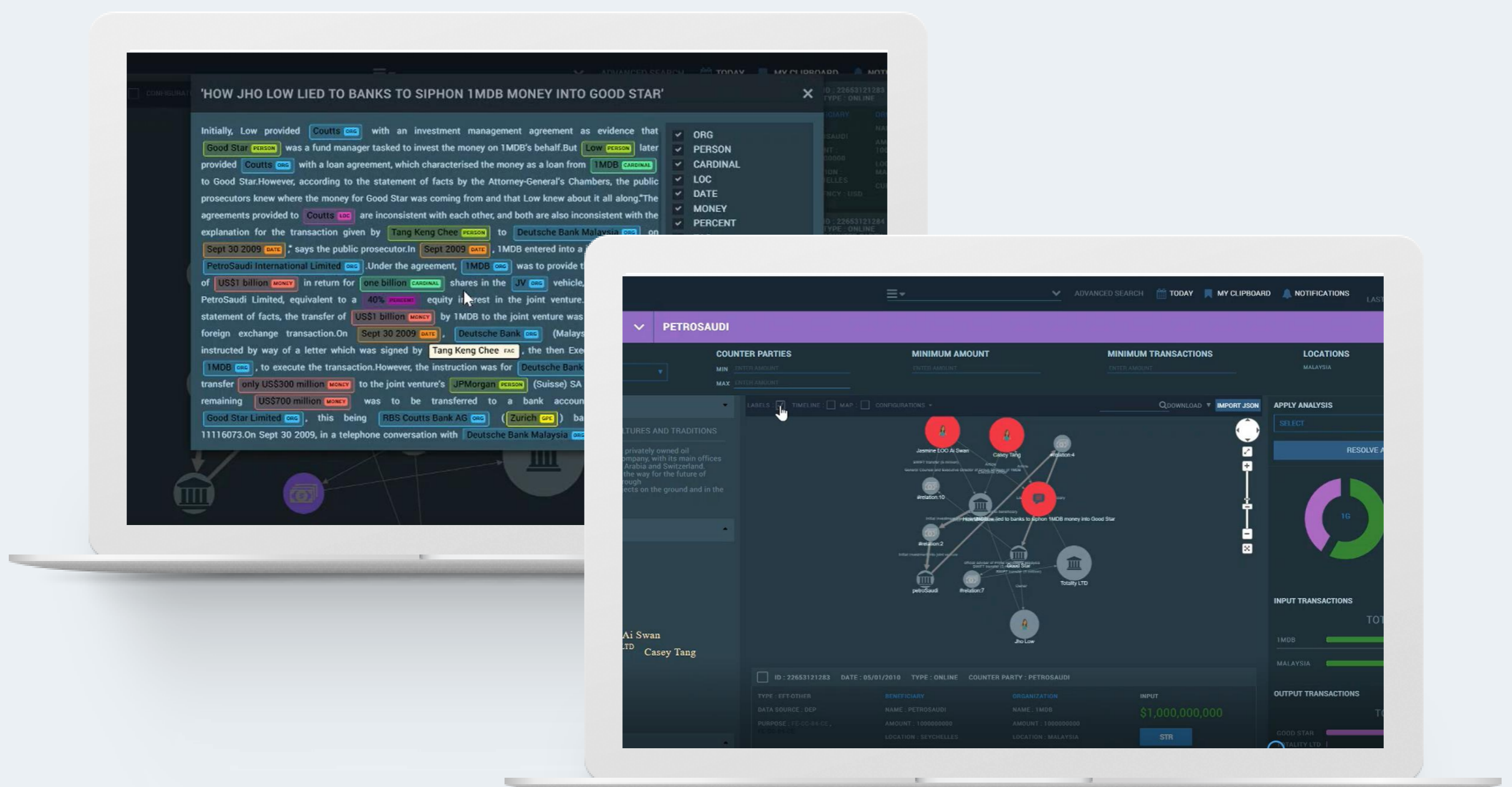
Cognitive computing represents data, learning and actions in new ways compared to traditional databases and transactional systems.



Gravity Hub - Process Data in Motion

A key capability for any cognitive entity is the provision to capture, filter, analyze and process data from its surrounding environment. Much like the human primitive brain, **ELEMENT**'s Gravity Hub is tasked with gathering information, interpreting it, and remaining constantly alert to basic needs. More concretely, Gravity Hub processes all data fed to, or compiled by, **ELEMENT**. Ingesting the data, it stores a copy of it locally, normalizes it, and organizes it for use by the analytic engines. Gravity Hub also applies basic business and system policies and generates alerts, wherever immediate action is required.

The Hub can ingest any structured or unstructured data, regardless of format, volume, velocity or method of acquisition. Common types of data compiled for **ELEMENT** are the results from its domain-customisable search engine and bots that extract data from Internet-based sources. Text processing extracts meaning and relationships (ontologies) from the information. The subsequent Cognitive Hub can even teach Gravity Hub to improve the data sources it uses, to maximize the accuracy and detail of information collected.





Cognitive Hub - Build Situational Understanding

A cognitive entity is capable of understanding data and exploiting it. The Cognitive Hub continuously monitors ingested information in order to enrich its knowledge, identify impact on its semantic networks, and detect potential business implications. Where there are gaps in data, the engine triggers additional searches to complete the information using alternative sources.

Cognitive Hub interprets data in light of configurable “ontologies” defined by domain experts to map organizational knowledge using semantic networks. These ontologies capture the entities, topics, relationships, domain-specific terminology and other aspects of business comprehension.

As the knowledge graph evolves, **ELEMENT** applies analysis tools to enrich the collected data. Geospatial and temporal analytics and behavioral science are applied to identify patterns and anomalies in the data, understand their implications and act upon them. Entity analytics disambiguate unique individuals or organizations and resolve conflicts over facts about them.

Meanwhile, machine learning and predictive analytics are applied to the collective knowledge to discover patterns that are relevant to the organization’s objectives. These patterns may pertain to customer behavior and loyalty, or macro-environment news and its impact on risks to a business, or the formation of business relationships and potential sales opportunities, as examples..

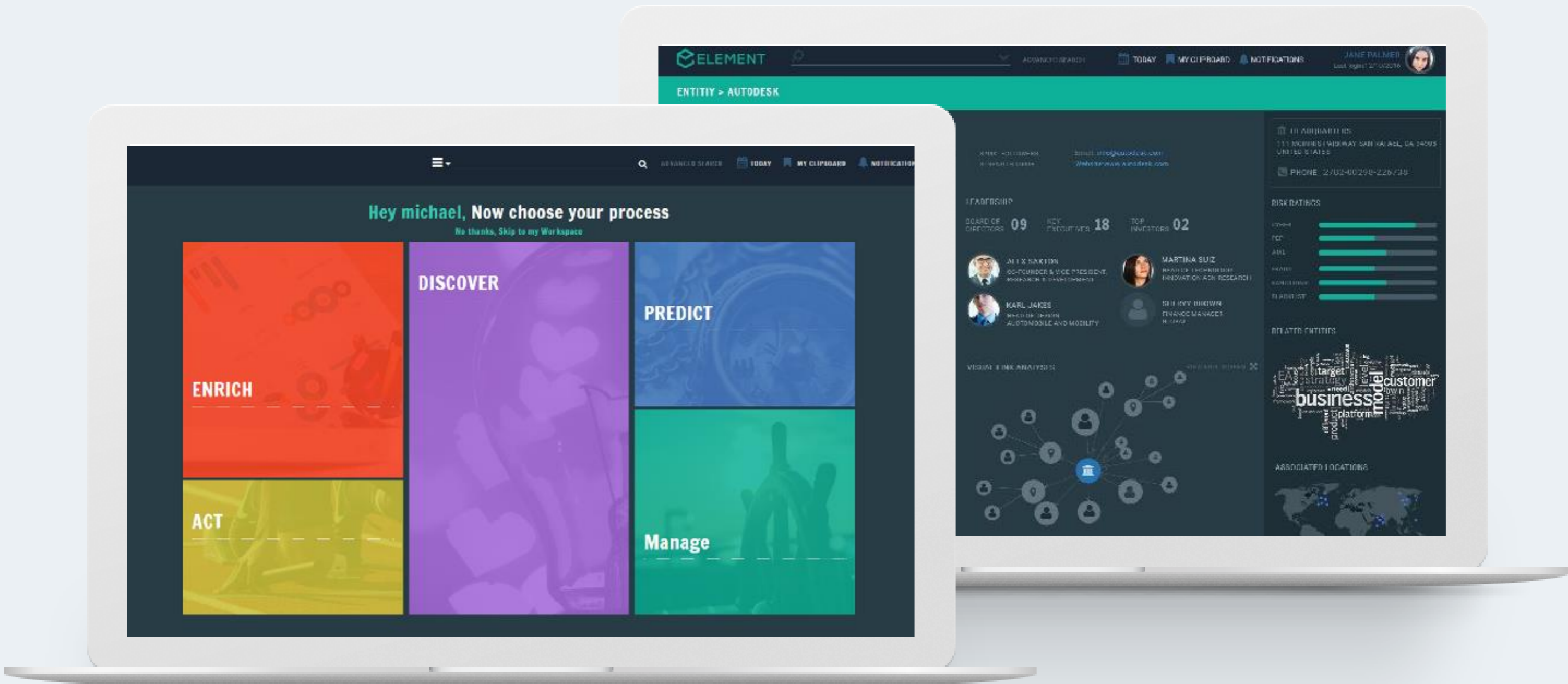




Exploration Hub - Augment Your Organisation's Intelligence through Insight and Interaction

The Exploration Hub focuses on the interaction of business analysts with the understanding and insights formed by the software. First, a user's work queue receives new and updated cases that the Cognitive Hub decided to escalate for human intervention. Examples of cases include new customer onboarding documents ready for review or alerts triggered as a result of enforced policies like regulatory compliance rules. A collaboration center supplements the investigation process, allowing teams to share and discuss information within the organisation and with trusted third parties.

The Exploration Hub also allows the analyst to explore the insights presented by the system, via an extensive set of tools. The Hub provides big data visualization methods, a variety of analysis tools (such as link analysis, geographic analysis, temporal analysis), data science manipulators, and more.

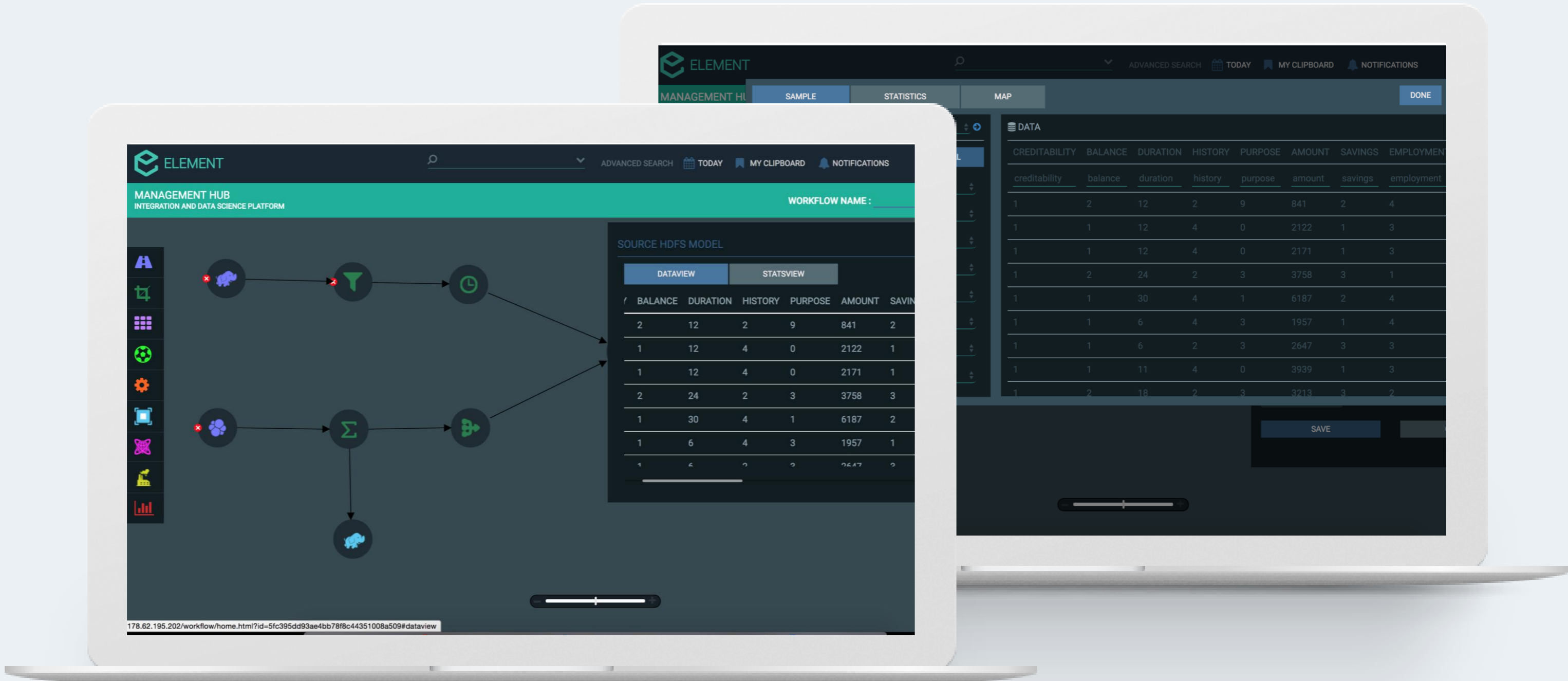




Management Hub - Centrally Configure Your Deployment for Ultimate Control and Flexibility

Cognitive computing represents data, learning and actions in new ways compared to traditional databases and transactional systems. Your technologists need a robust means of managing these enterprise intelligence applications, while your security and compliance teams must be confident they are adhering to business policies and regulations.

ELEMENT delivers on these requirements via its Management Hub module. It provides a centralised console for configuring the application(s) and controlling access. There are distinct console areas for managing ontologies, taxonomies, workflows, users, access, integrations, data sources, rules, auditability and more. Use a drag & drop interface to define data pipelines then build business logic and policy enforcement rules. Monitor computing tasks. Control user access according to configurable domains, security clearance or job level. When needed, reference the audit trail of all data changes and user actions.





A Unique Application with Compelling Advantages

BlackSwan Technologies' **ELEMENT** is the most powerful and cost-effective software for enterprises to exploit big data and artificial intelligence. Its power stems from the comprehensive scope of leading-edge intelligence capabilities, integrated specifically to generate critical insights and drive decisions from all kinds of raw data. **ELEMENT**'s low of cost ownership is based on an unintrusive means of accessing existing data, a centralised management hub, and interfaces for your technologists and business users that involve minimal training on data science or A.I.



DIGITAL



MODULARITY



TCO



FULL KNOWLEDGE
CYCLE



LIMITLESS SCALE

Many of our clients choose to evaluate **ELEMENT**'s ROI by opting for one of our domain-specific applications, which have already been tailored for specific industries and business functions. These include audit, banking, consumer/entertainment, insurance, marketing, competitive intelligence and recruiting.

To make it attractive for your organization to explore and grow its use of **ELEMENT**, BlackSwan offers flexible licensing models for the software. There are price tiers for initial exploration of the software; proof of concept phase; full rollout; and enterprise-wide deployment. In addition, organizations building applications on **ELEMENT** for commercial resale are eligible for a "community" license, with special pricing and terms that make it attractive to embed cognitive computing capabilities in your solutions right now.

Learn more about **ELEMENT**'s capabilities for your industry via
INFO@BLACKSWAN-TECHNOLOGIES.COM