Knowledge Graph

A linkage-based investigation solution that empowers contextual decisions.
Connect data, analyze linkages and uncover new patterns in real time.

Where Can Knowledge Graph Be Used?

Risk Management

Monitor business risks, credit risks and policy violations by deploying advanced network analysis to evaluate vast amounts of data and risk-assess criminal behaviors.

Fraud Detection

Stop multiple fraud types, including application fraud, identity fraud, transaction fraud, ATO, fraud rings and insurance fraud with a contextual approach that looks beyond isolated behaviors.

Anti Money Laundering

Detect complex money laundering activities and money mules quickly and accurately, by creating a holistic view of your data and discovering multi-dimensional connections.

Investigation

Boost investigators' efficiency by combining human expertise with an AI-powered, user-friendly investigation platform, helping them spot emerging attacks in real time.
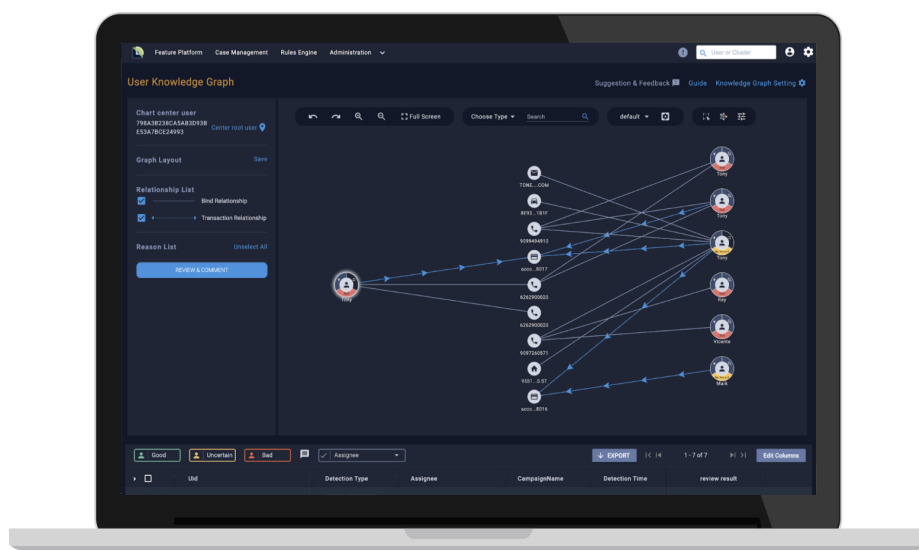
A New Approach to Investigation—Knowledge Graph

What Are the Challenges for Investigation Teams?

Disparate Data

Data overflow, data silos and the wide adoption of unstructured data create challenges for organizations to derive actionable intelligence, especially in real time.

Isolated Analysis

Individual-based investigations are not intuitive or effective to uncover sophisticated patterns, letting undetected attacks slip through the cracks and creating high rates of false positives.

Slow Investigation

Intensive manual scanning and investigations are slow and time-consuming. Risk detection can't keep pace with criminals, and operational overhead increases.

What Capabilities Does Knowledge Graph Provide?

Network Analysis

Real-Time Graph Building and Deep-Link Analysis

Build multi-dimensional connections among entities, groups, money flows, IPs, emails and other attributes in real time, to uncover hidden patterns and empower contextual decisions.

Smart Layout with an Intuitive View

Provide an easy-to-understand layout that displays critical connections based on different risk and fraud scenarios, so that investigators get the most valuable insights while not being overwhelmed by trivial information.

Customized Templates for Cross-Functional Teams

Allow users from different teams to create customized templates – define linkages, and set volume and time windows, to help them combine human expertise with AI and share knowledge across the entire organization.

Advanced Investigation

One-Click Investigation

Highlight fraudulent relationships in the network and support one-click investigations that connect the new entities or events with previously detected fraud rings, without the need for manual searches.

Intelligent Search Based on Advanced Criteria

Provide advanced search beyond basic entities or events. For example, users can search transactions that are greater than $500 in 7 days, or find immediate money flow in and out.

Drill-Down Capability and Configurable Network Depth

Support configurable connection and network depth building according to your business needs, allowing investigators to expand multiple layers and get insights at a granular level.

Dynamic Integration

Ingestion of Internal and External Heterogeneous data

Connect structured and unstructured data from various sources in real time, via API or user uploading, including cloud and on-prem databases, local files, third-party databases and signals.

Dynamic Update on Blacklists and Whitelists

Update blacklists and whitelists in real time, based on your investigations and the decisions made in Knowledge Graph.

Seamless Integration with Your Workflow

Integrate with DataVisor or your internal case management, rules engine and machine learning engines to streamline the workflow.

Key Business Benefits

Discover More Threats with Contextual Decisions

Investigate cases with a linkage view. Capture sophisticated patterns and crime rings with a high degree of accuracy.

Save Time on Analysis and Improve Efficiency

Reduce the time of manual scanning, improve efficiency by 10-100X and always stay up to date on criminal activities.

Make Quick Decisions in an Intuitive Manner

Provide a visual-based investigation that is easy to understand — human brains process visual images 60,000X faster than text.

Flexible and Easy Integration

Data	Knowledge Graph	Detection & Case Management
Internal Structured Data		Blacklist & Whitelist
Internal Unstructured Data		Rules Engine
Third-Party Data		Machine Learning Engine
Vendor Signals		Case Management

Results that Matter

15,000+ QPS

Real-time investigation and network analysis in a high QPS environment.

10-50ms Latency

Fast processing and rapid response with extremely low latency.

1 Billion+ Events

Handles billions of events and stores years of extensive data.

ABOUT DATAVISOR

DataVisor is the leading fraud detection company powered by transformational AI technology. Using proprietary unsupervised machine learning algorithms, DataVisor restores trust in digital commerce by enabling organizations to proactively detect and act on fast-evolving fraud patterns, and prevent future attacks before they happen. Combining advanced analytics and an intelligence network of more than 4.2B global user accounts, DataVisor protects against financial and reputational damage across a variety of industries, including financial services, marketplaces, e-commerce, and social platforms.