



Introducing RelationalAI

The AI coprocessor for your data cloud



Bring workloads to the data



Data
Engineering



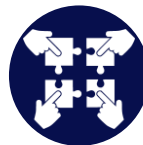
AI/ML



Applications



Governance



Collaboration



Data
Warehouse



Data Lake



Security

DATA CLOUD

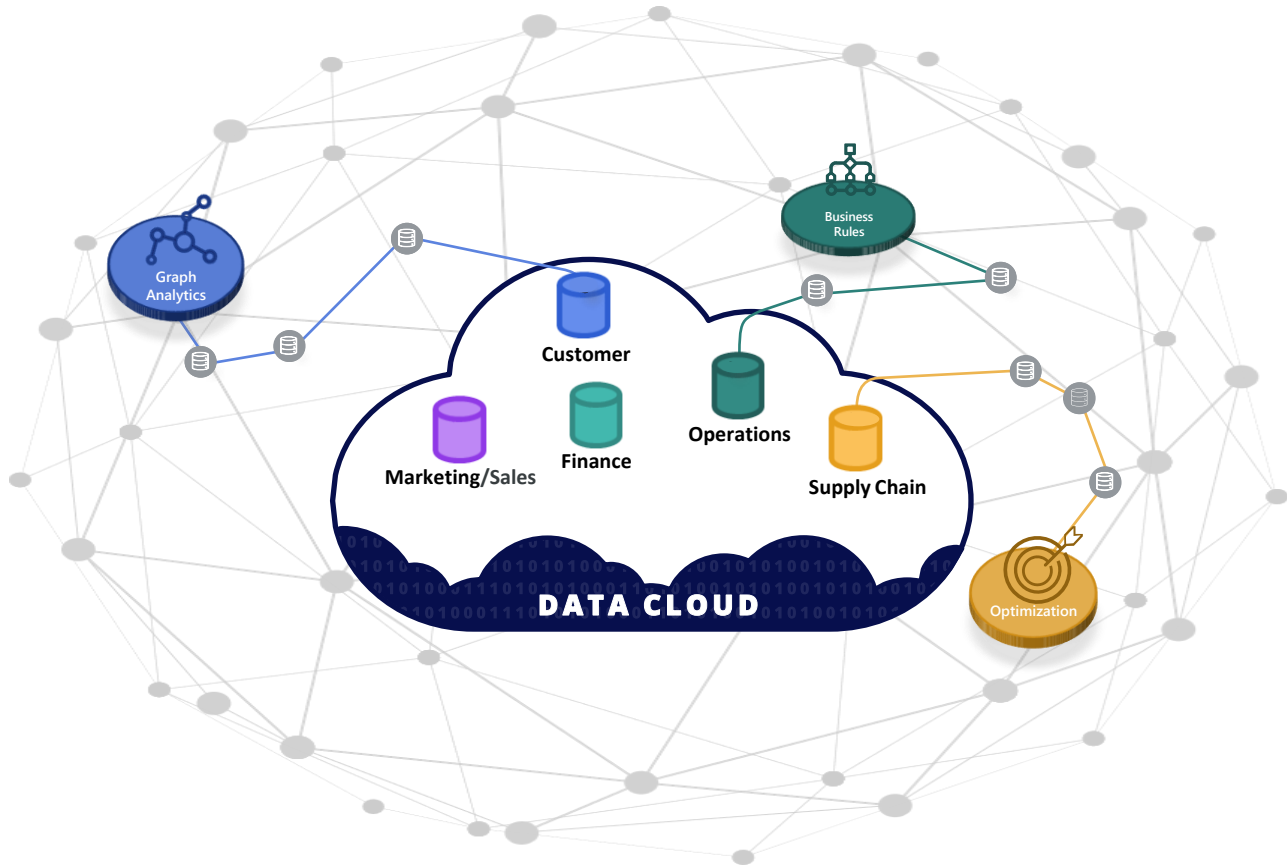
Realities of integrating with solutions that are neither cloud-native, nor relational

Is my data **up to date**?

Are these isolated solutions **secure**?

Do I have the right **access controls**?

Can these solutions **scale**?



RelationalAI offers a different approach

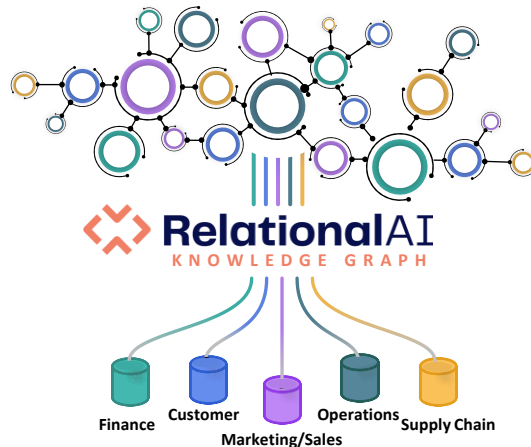
Data always
up-to-date

Same **security**

Same **governance**

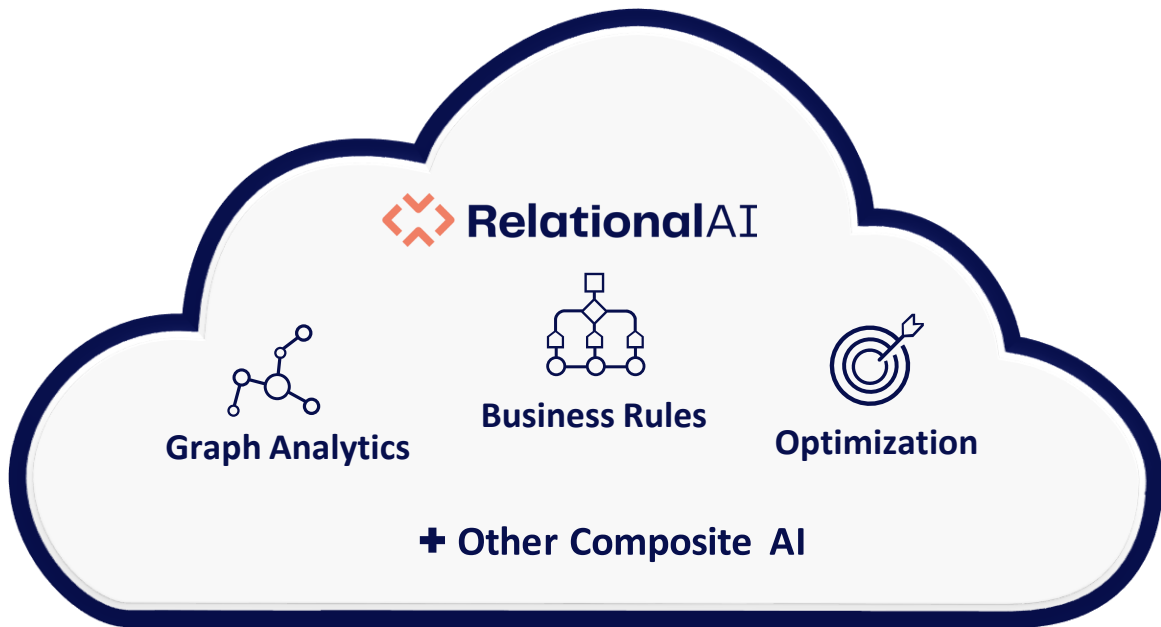
Consistent
definitions

Limitless **scale**

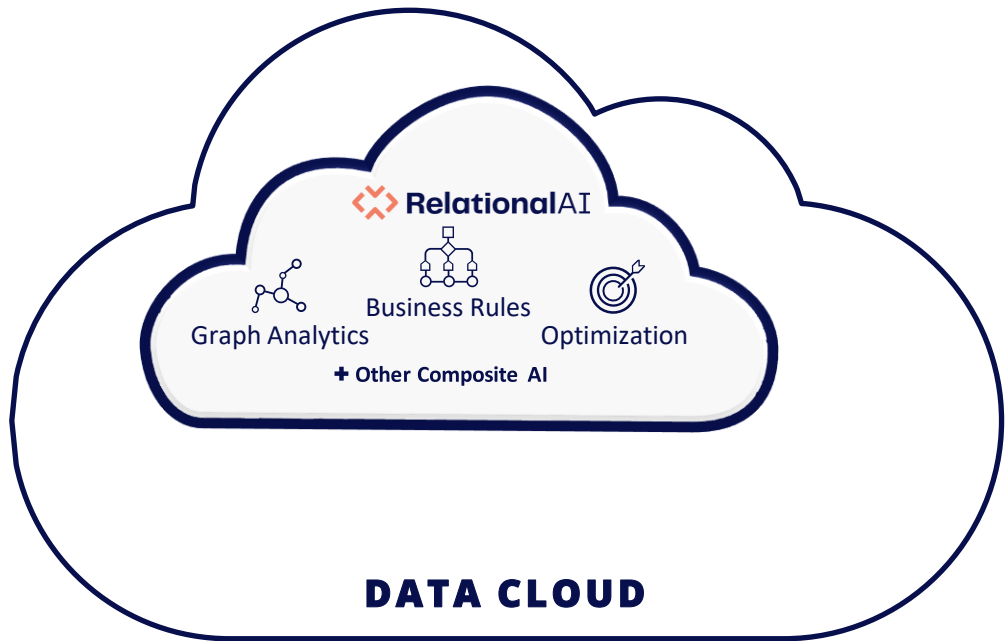


DATA CLOUD

**RelationalAI
brings graph
analytics and
other composite
AI workloads to
your data...**



**...extending your
data cloud with the
industry's first
AI Coprocessor**

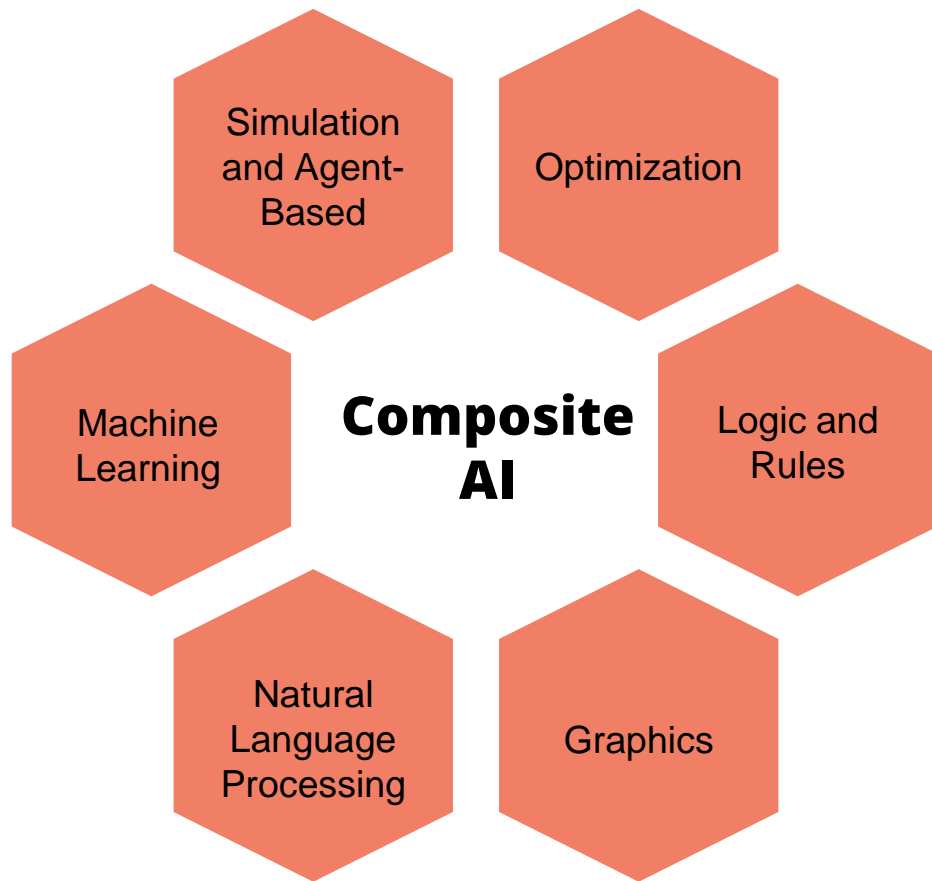




RelationalAI is the **AI coprocessor**
for **your data cloud**
with **Relational Knowledge Graphs**



What do we mean by AI?



Source: **Gartner** 2021, 2022

What do we mean by **AI**?

Composite AI:

A combination of different techniques needed to improve decision-making effectiveness (Decision Intelligence)





What do we mean by **Coprocessor?**

What do we mean by **coprocessor**?

Requirements

Same Governance

Same Architecture

Same Paradigm



Embedded in your Data Cloud

Inside security perimeter, with the same governance, and without the need to synchronize data with external workload-specific point band-aids



Cloud-native

The new table stakes: architected for scale and flexibility



Relational

Proven and trusted paradigm. A universal representation for data and knowledge

RelationalAI customer benefits



Complete your **data cloud** with relational knowledge graphs



Power **better decisions** with enriched semantic models



Build **intelligent applications** on a data-centric foundation



Drive efficiencies and savings

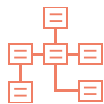
Benefits of RelationalAI compared to alternatives

RelationalAI brings together the best of relational technology and knowledge graphs to create an AI coprocessor that expands your data cloud with new capabilities.



Cloud-native

Get zero-copy cloning, workload isolation, and effectively infinite storage and compute.



Graphs as Relations

Represent graphs and relational data models as atomic, irreducible relations.



Novel join algorithms

Benefit from the latest algorithms that dramatically speed up graph traversal, multi-way joins, and complex queries without sacrificing performance.



Data cloud Integrated

Gain support for new workloads while adhering to the same architecture, paradigm, and governance as your Data Cloud.



Graph Analytics

Get native support for a wide range of algorithms for common graph analytics tasks including centrality, community detection, similarity, and path analysis.



Rules + Business Logic

Embed and execute rules and business logic in the knowledge graph. Compose applications as modular units of logic to drive consistency and reusability across the organization.



Optimization


Express and experiment with optimization models to solve business objectives with any open source or commercial solver.



Familiar Tooling

Reason over data with tailored SQL functions and procedures that provide seamless access to knowledge graphs.



A complex network diagram on the left side of the slide. It consists of numerous grey nodes (circles, squares, and triangles) connected by thin grey lines. Several nodes are highlighted with larger, semi-transparent circles. One prominent node in the upper-left quadrant is a large red circle containing a white 'X' icon, which is the RelationalAI logo. Other nodes include a grey triangle, a grey square, and a grey circle with a smaller concentric circle inside.

RelationalAI enables you to
answer more questions within
your **Data Cloud**

Trusted by customers

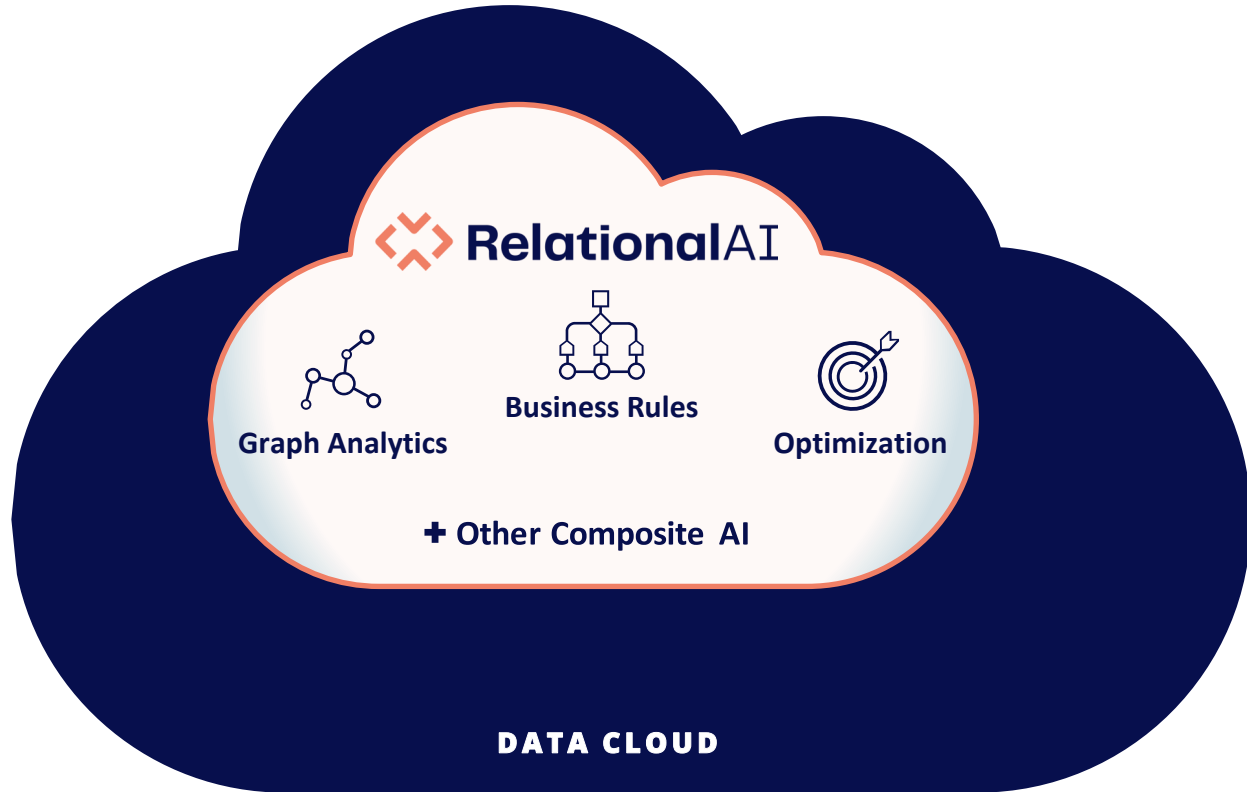


"Acting as an AI coprocessor, RelationalAI enables us to enhance our semantic models and perform **sophisticated analysis like graph analytics to understand latent patterns** in our data." - Mark Austin, VP of Data Science and AI



"The ability of RelationalAI to compress business rules and scale processing is stunning. Using their relational knowledge graph system, **we slashed legacy code by 90% and reduced processing times from over a month to several hours.**" - Tax Technology Leader, EY Financial Services Office

Get started today with graph analytics



Use graph algorithms to uncover hidden meaning



What groups are interacting the most?

Can I find patterns of fraud?



Community Detection



Who are the key influencers?

Where are my bottlenecks & risks?

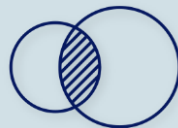


Centrality



Which items are most alike based on behavior?

Can I improve recommendations?



Similarity



Will these companies collaborate in the future?

What links are missing in my data?



Link Prediction



What is the most cost-effective, best route today?

What are my alternatives?



Paths



Use cases

DATA ENGINEERING

Entity Resolution

Use a knowledge graph to “see” through noisy data to find related information and duplicated data

GRAPH ALGORITHMS



Similarity



PROBLEM

Difficulty identifying related or duplicated entities/accounts in data

People and companies have multiple personas and types of interactions, which spawns multiple accounts and entities.

It's time-consuming to identify related entities within aggregated data from multiple channels.

SOLUTION

RelationalAI's knowledge graph clarifies connections

Knowledge graphs capture and surface relationships between data, uncover duplicate data and overlapping personas (e.g., Is this Elon Musk the person or the CEO? CEO of which business?).

DATA SCIENCE

Fraud detection

Build graph-based features to improve your fraud model predictions

GRAPH ALGORITHMS



Community Detection



PROBLEM

Fraud is a major concern across industries. Losses in telecom alone total \$40B+/year globally

Machine learning methods often don't include graph-based features, which can expose important relationships in data and enhance model precision and recall.

SOLUTION

RelationalAI's graph analytics capabilities identify ML features

Graph-based features boost model performance, yielding significant business impact.

TRACK & TRACE

Supply Chain Risk Management

Mitigate risks through a comprehensive understanding of the relationships across your supply chain

GRAPH ALGORITHMS



Centrality



Paths



PROBLEM

Difficulty anticipating and managing supply chain disruptions due to lack of visibility

Traditional approaches don't capture the interdependencies and intricacies of today's complex supply networks.

Lack of scenario planning and limited visibility hinders efforts to plan for unexpected events.

SOLUTION

RelationalAI's knowledge graph provides context and relationship mapping across data sources

Data from various sources and types provide a holistic view of supply chain operations to identify risks faster.

Scenario analysis and predictive analytics enable managers to forecast and mitigate potential risks.

INVESTING

Investment Opportunities

Identify new investment opportunities, armed with data from various sources in a unified single view

GRAPH ALGORITHMS



Community
Detection



Centrality



Link
Prediction



PROBLEM

Finding the right investment opportunity is time-consuming and expensive

Manual data processing, analysis and reporting are difficult to manage and scale across an organization

SOLUTION

RelationalAI's Knowledge Graph provides graph of opportunities

Knowledge graph surfaces key relationships for fast insights in context of what's important. Data is always up to date and scales to fit your needs.

RELATIONSHIP MANAGEMENT

Customer 360

Uncover important relationships and connections to improve recommendations

GRAPH ALGORITHMS



Community
Detection



Centrality



Similarity



PROBLEM

Personalization is difficult without understanding customer connections

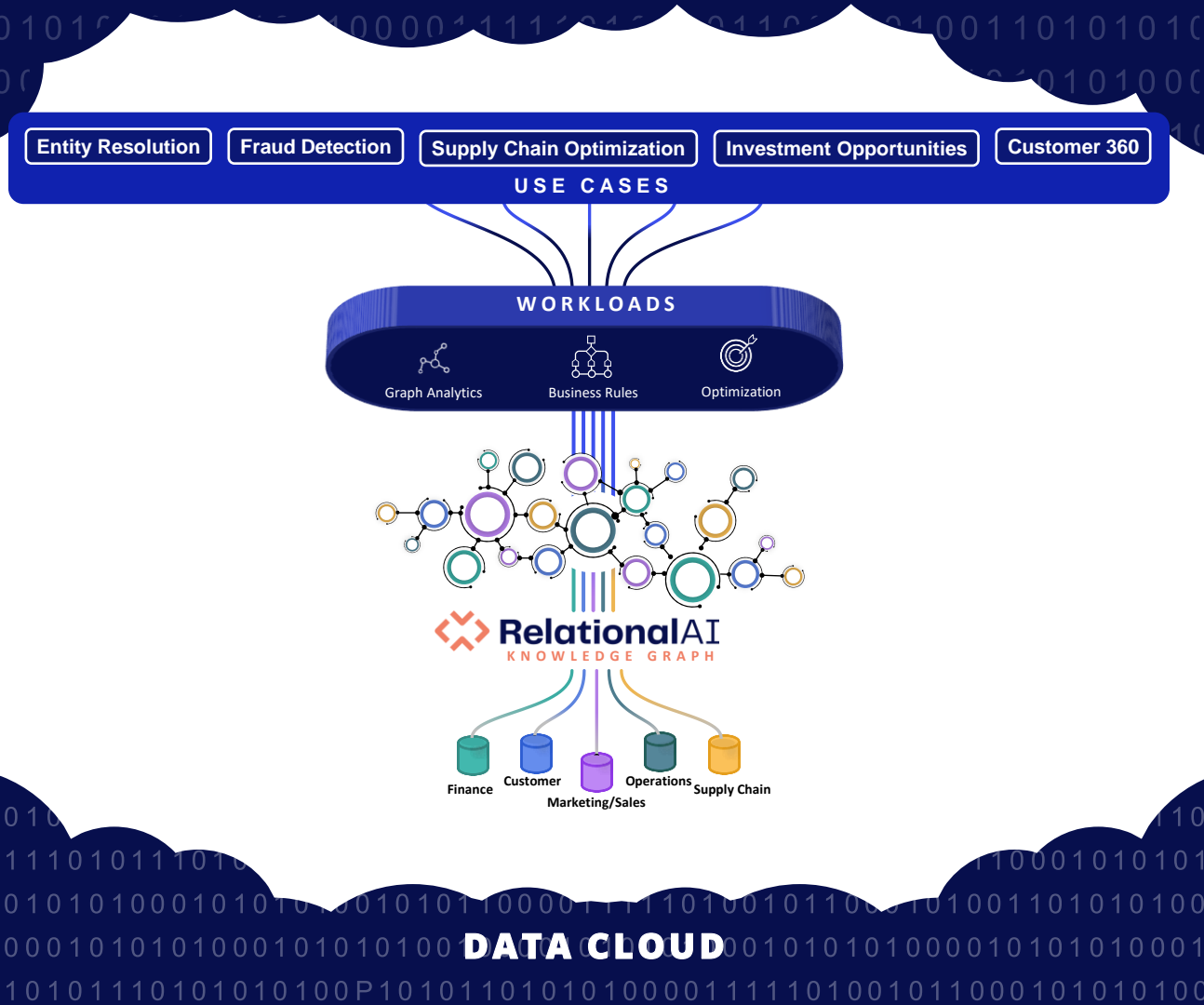
Traditional solutions often don't include graph-based knowledge, which can expose important relationships among customers and enhance understanding of preferences.

SOLUTION

RelationalAI's Knowledge Graph identifies key relationships

Knowledge graph surfaces key relationships and spheres of influence to enable a new level of personalization.

Bring
workloads to
your data



A complex network diagram on the left side of the slide. It consists of numerous nodes (circles, squares, triangles) connected by thin lines. A prominent feature is a large, central node that is a red circle with a white 'X' inside, surrounded by a grey ring. Other nodes include a grey triangle, a grey square, and several smaller grey circles, all interconnected within a web of lines.

All data, all workloads

Visit www.relationalai.com to learn more

Contact RelationalAI at team-sales@relational.ai

Next Steps



Thank You

