

The Knowledge Graph Explosion

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88%

CXOs believe knowledge graphs will significantly improve bottom line

Pulse Survey, 2020

Two-thirds

of Neo4j customers
have implemented knowledge graphs

Neo4j Customer Segmentation Analysis, 2020

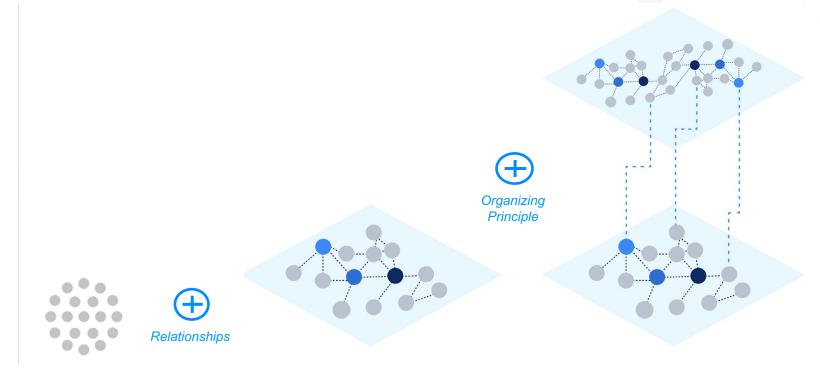


A small sample of Neo4j Knowledge Graph EMEA Customers



A knowledge graph is an interconnected dataset enriched with meaning so we can reason about the underlying data and use it confidently for complex decision-making.





Data

Graph Dynamic Context

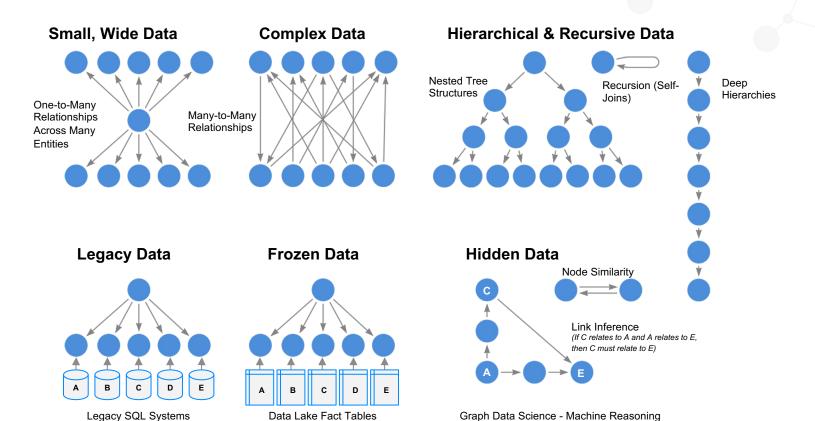
Knowledge Graph

Deep Dynamic Context



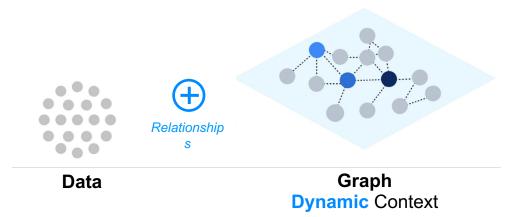
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Data Comes in Many Shapes & Sizes



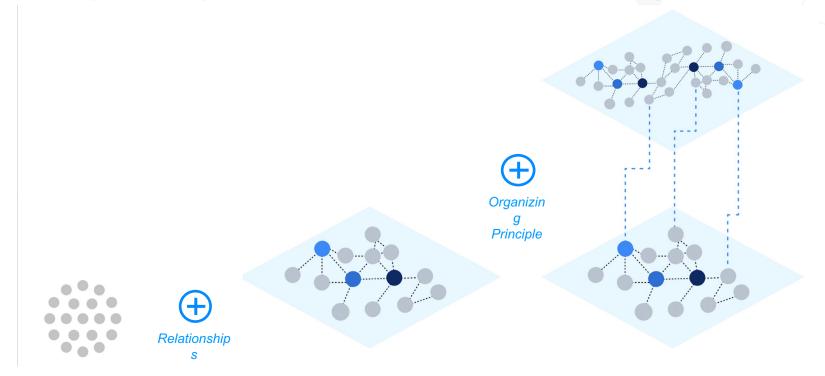












Data

Graph Dynamic Context

Knowledge Graph

Deep Dynamic Context





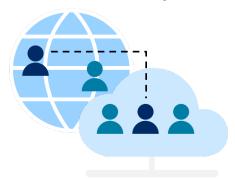
What is Semantics?

Controlled Vocabularies

Synonym Rings Taxonomy Thesaurus Ontology

COMPLEXITY

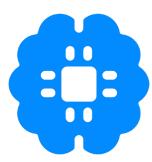
Entity Resolution & Analysis



Classification & Tagging

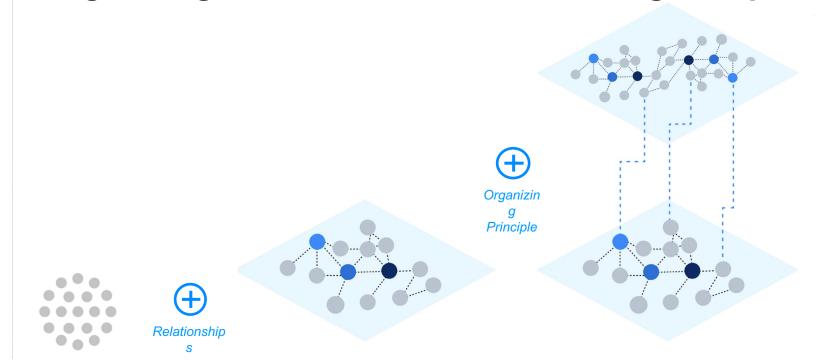


Artificial Intelligence









Data

Graph Dynamic Context

Knowledge Graph

Deep Dynamic Context



BUSINESS USE CASES



DATA MANAGEMENT

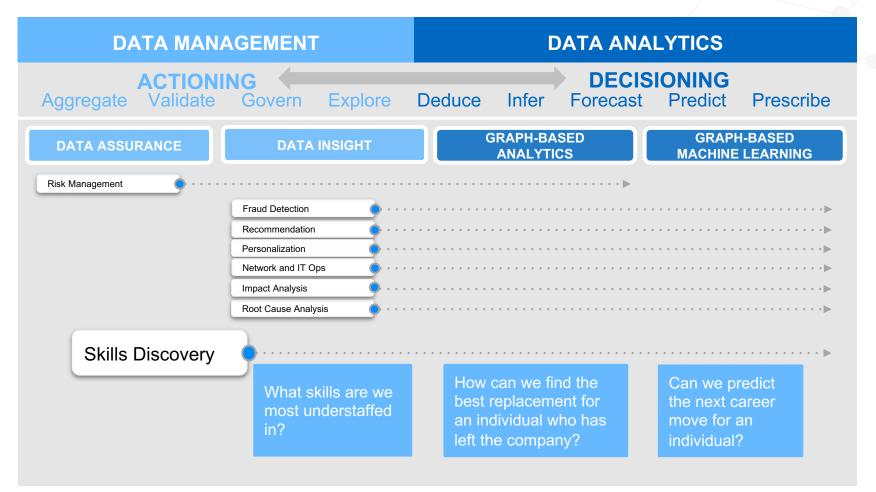
DATA ANALYTICS

ACTIONING CONTROL DECISIONING

	Aggregate	Validate	Govern	Explore	D	educe	Infer	Forecast	Predic	et Pi	rescribe
	DATA ASSURANCE		DATA INSIGHT			GRAPH-BASED ANALYTICS		GRAPH-BASED MACHINE LEARNING			
BUSINESS USE CASES	Data Governance Data Compliance Risk Management Augmented MDM		X-360 X-Journey X-Discovery Recommendation Personalization Anti-Money Laundering Identity & Access Mgmt Network & IT Operations Root Cause Analysis			Fraud Risk Analysis Track & Trace X-360 Analytics X-Journey Analytics Churn Analysis Next Best Action What-If Analysis Impact Analysis		Entity Resolution KG Completion Predictive Models			
TECHNOLOGY USE CASES	Data Catalog Data Lineage Data Provenance		Graph-E	Graph-Based Search		Path-Finding Community Detection Influencer Identification Similarity		ection fication	Link Prediction Node Classification Feature Engineering		
	Data Fabric										

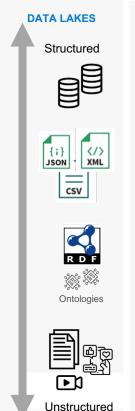
Graph Analytics Power Knowledge Graphs



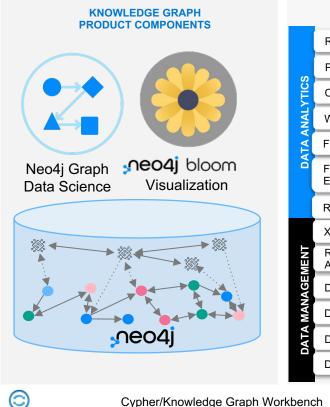


Knowledge Graphs Connect the Ecosystem

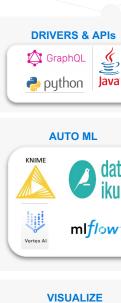














Putting Knowledge Graphs to Work in EMEA



EL Corte Inglés Recommendations



Zurich Insurance Fraud Detection



Deutsche Bahn Track & Trace



- Challenge: Existing solution could not offer real-time recommendations
- Solution: Neo4j Knowledge Graph
- 1.5M promotions/day totally transforming company's real-time promotion engine

- Challenge: Needed a quick way to identify fraud in a flood of automatically generated alerts.
- Solution: Neo4j Knowledge Graph
- 50,000 hours/ year of investigators' time saved

- Challenge: Legacy technology could not take dependencies into account to detect and analyze train journeys
- Solution: Neo4j Knowledge Graph
- Identified bottlenecks and heavily used track sections and best paths based on distance, cost and train suitability











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Contact us at sales@neo4j.com

Resources

Graph Resources

- Neo4j Knowledge Graph Homepage: neo4j.com/knowledge-graph
- White Paper: From Graphs to Knowledge Graphs: A Short Journey to Unlimited Insights
- Video: Advantages of Graph Technology | https://neo4j.com/videos/why-graph/
- Case Study: UBS | https://neo4j.com/case-studies/ubs-case-study/
- Case Study: Meredith Corporation | https://neo4j.com/users/meredith-corporation/

Neo4j Bookshelf

- Graph Databases For Dummies | https://neo4j.com/graph-databases-for-dummies/
- Graph Data Science For Dummies | https://neo4j.com/graph-data-science-for-dummies/
- O'Reilly Knowledge Graphs: Data in Context for Responsive Businesses |
 https://neo4j.com/knowledge-graphs-data-in-context-for-responsive-businesses/







