

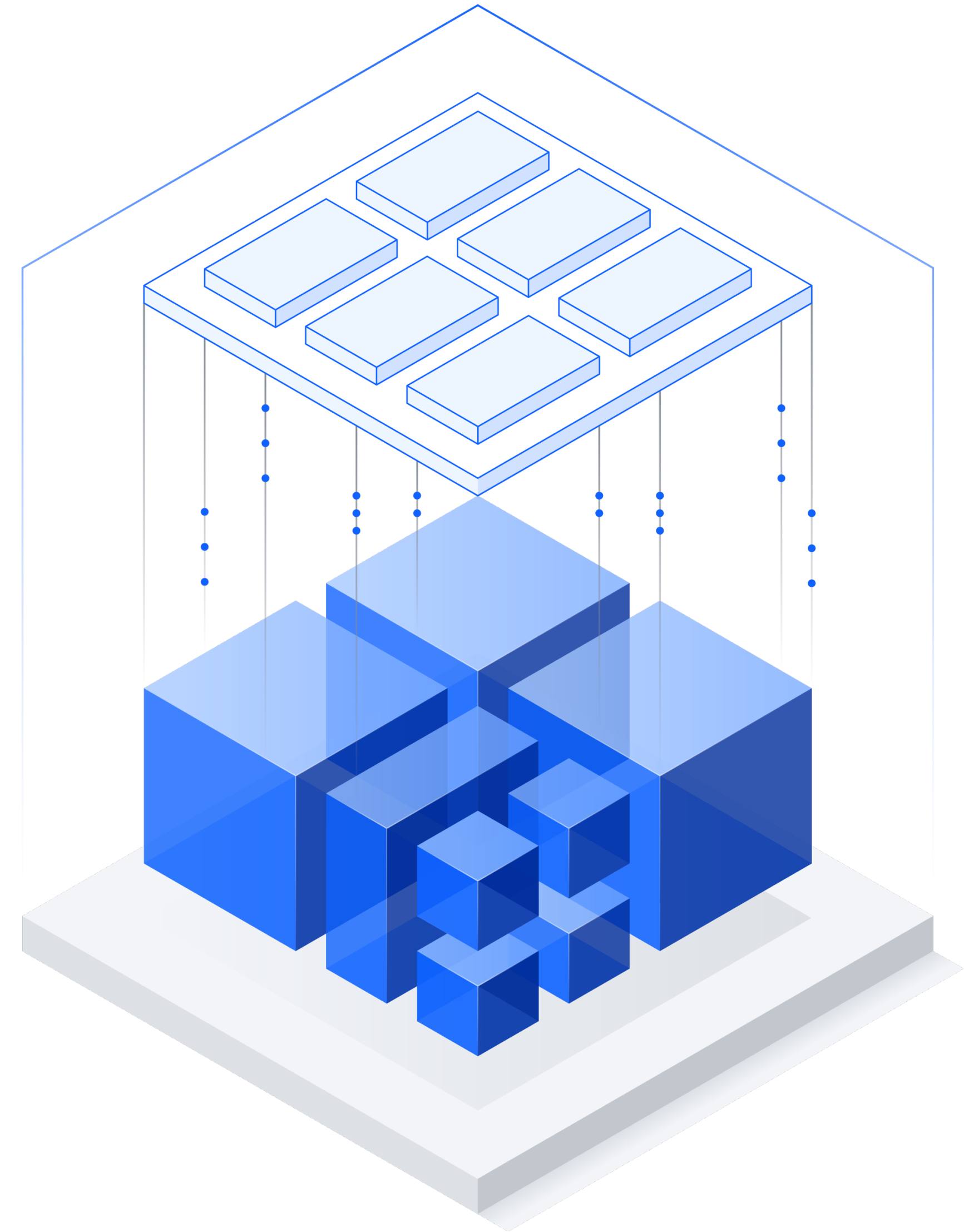
IBM Manta Data Lineage

How Data Lineage Enables Simpler
Regulatory Compliance

—

Joe Chmielewski
Technical Product Manager
Joe.Chmielewski@ibm.com

Eli Carter
Technical Product Manager
Eli.Carter@ibm.com



Key Regulations Across Markets

US

SOX – Corporate Disclosures and Financial Reporting

PCI DSS – Payment Card Industry Data Security Standard

FASB CECL – Current Expected Credit Losses

DFS 504 – Financial Institutions transaction monitoring system and sanctions filtering program

ADPPA – American Data Privacy and Protection Act

CCPA/CPRA – California Consumer Privacy Act/Privacy Rights Act

CDPA – Virginia Consumer Data Protection Act

CTDPA – Connecticut Data Privacy Act

UCPA – Utah Consumer Privacy Act

Europe

GDPR – Privacy

IFRS 9 – Expected credit losses

IFRS – Financial Reporting & Certification of Financial Reports

BCBS 239 – Basel Committee on Banking Supervision BASEL II/III

PSD2 – Payment Services Directive 2

MiFID II – Markets in Financial Instruments Directive

CRD IV – Capital Requirements Directive IV

NIS Directive – Directive on Security of Network and Information Systems

Canada

Bill 64 – Privacy Act

PIPEDA – The Personal Information Protection and Electronic Documents Act

CASL – Canada’s Anti-Spam Legislation

DCIA – The Digital Charter Implementation Act

China

PIPL – Personal Information Protection Law

DSL – Data Security Law

CSL – Cybersecurity Law

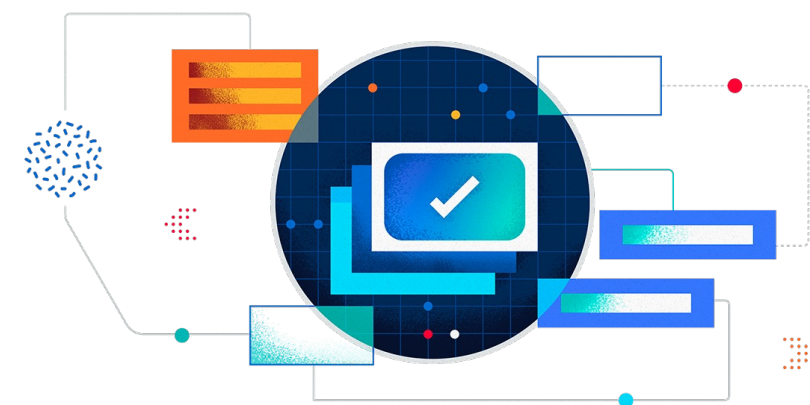
Impacts of Non-Compliance

Financial Burden

Fines and Penalties:
GDPR fines up to €20 million or 4% of global annual revenue, whichever is higher.

Legal Costs:
Costs associated with legal defense and settlements.

Remediation Expenses:
Costs for implementing corrective actions, such as system upgrades, additional compliance staff, and enhanced security measures.

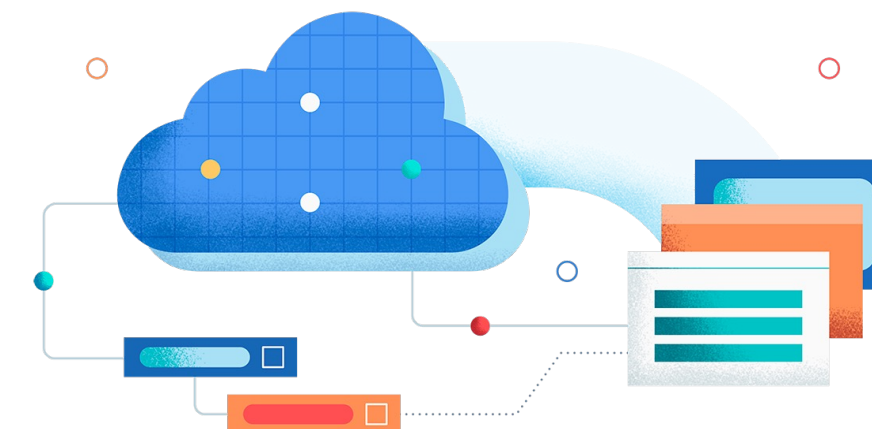


Operational Disruptions

Business Interruptions:
Forced shutdowns, operational delays, or loss of business licenses.

Increased Audit Frequency:
More frequent and stringent audits leading to resource strain

Operational Inefficiencies:
Disruptions in workflow due to non-compliance remediation efforts, leading to decreased productivity and increased operational costs.



Reputational Damage

Loss of Customer Trust:
Decreased customer confidence and potential loss of business.

Negative Publicity:
Media coverage and negative public perception.

Damage to Brand Image:
Long-term impact on brand reputation, making it difficult to attract new customers and retain existing ones.



Business Impacts

Regulatory Questions Lineage Simplifies

Financial Reporting

- What is the source of the information in my reports?
- What transformations have occurred to the data?
- What other systems leverage the data?

Personal Information

- Where is Personally Identifiable Information (PII) in my system?
- What is the source of the PII?
- How was the information assembled?
- Where does this information end up?
- Is the information going places we did not intend?

What do I need for compliance?

- A data map
- Documentation of your data ecosystem

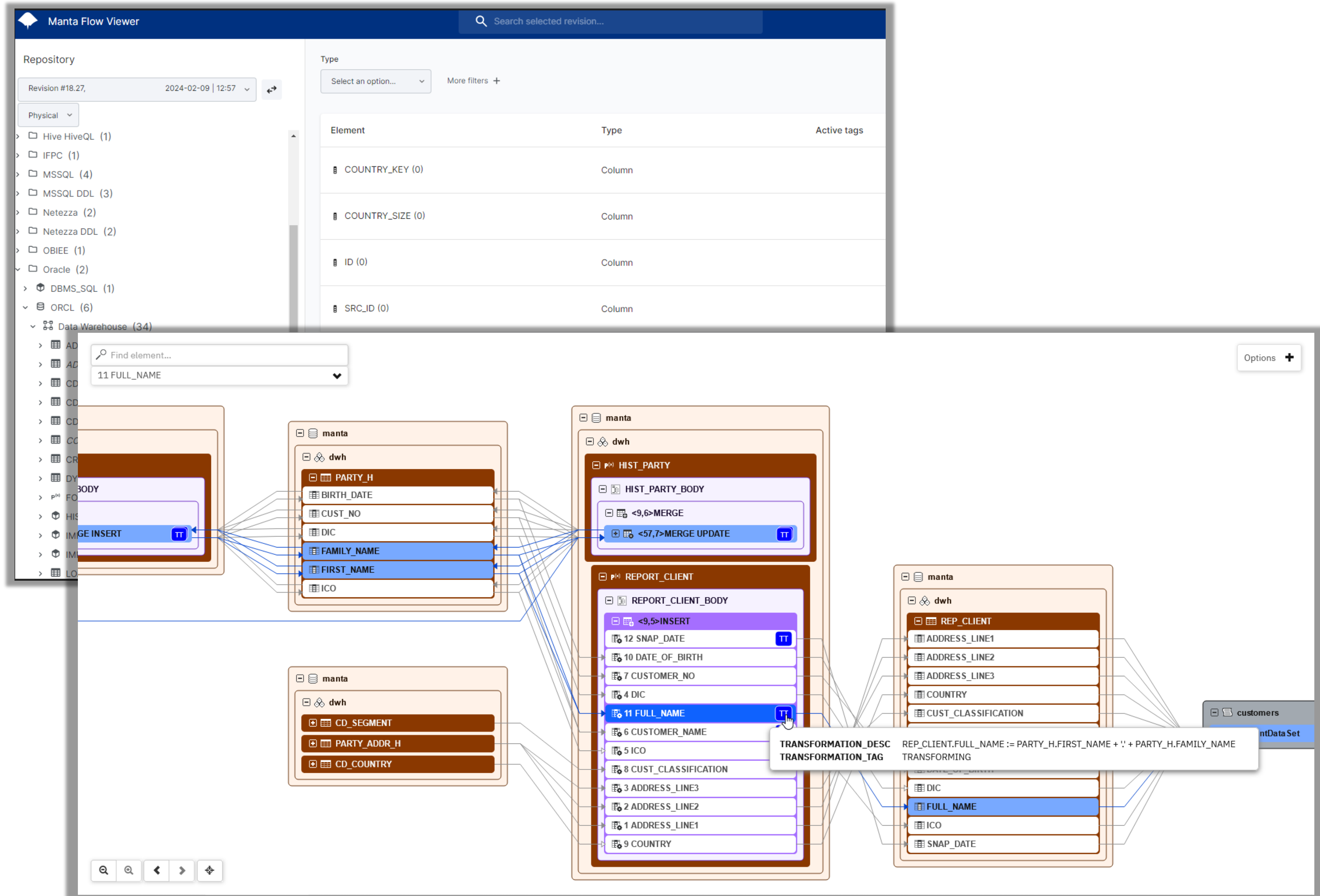
IBM's Manta Data Lineage

Manta is the market leader in automated data lineage

The platform reads code and builds a map of how data flows across analytical environments

Companies use Manta to unravel the complexity of their data pipelines

Saving time + resource while improving the accuracy of their results



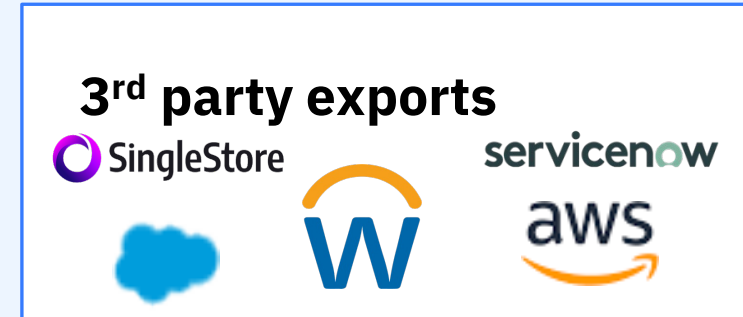
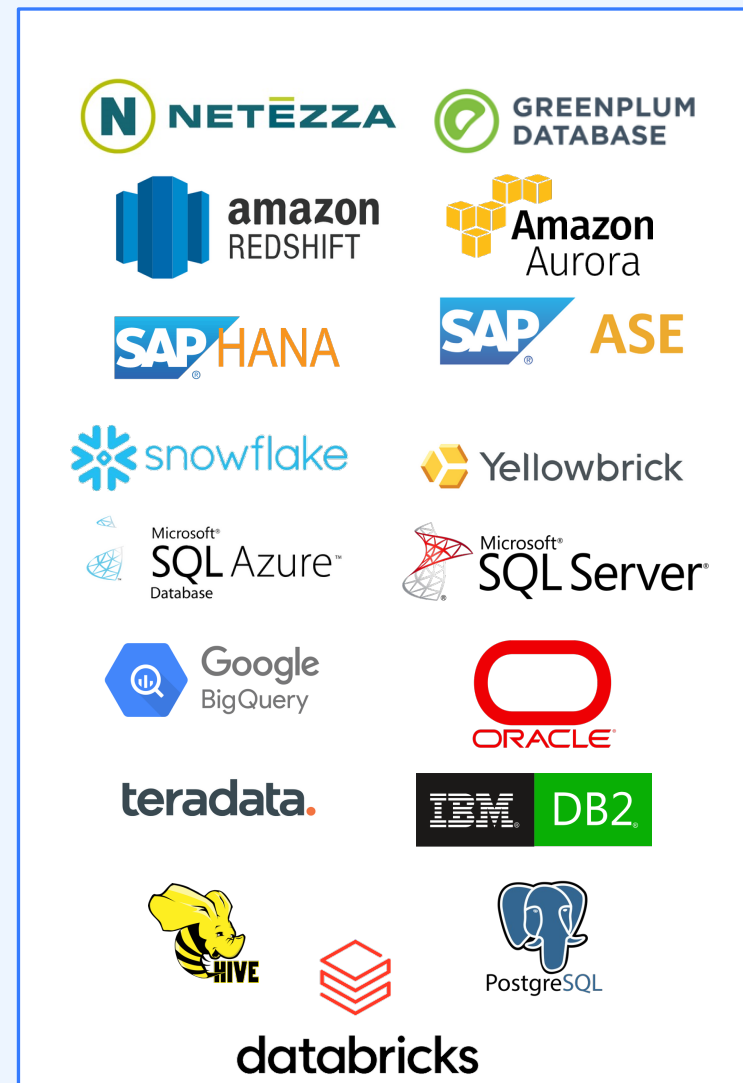
Simplify **Visibility** over a siloed ecosystem



IBM Manta Data Lineage Reach

50+ Technologies

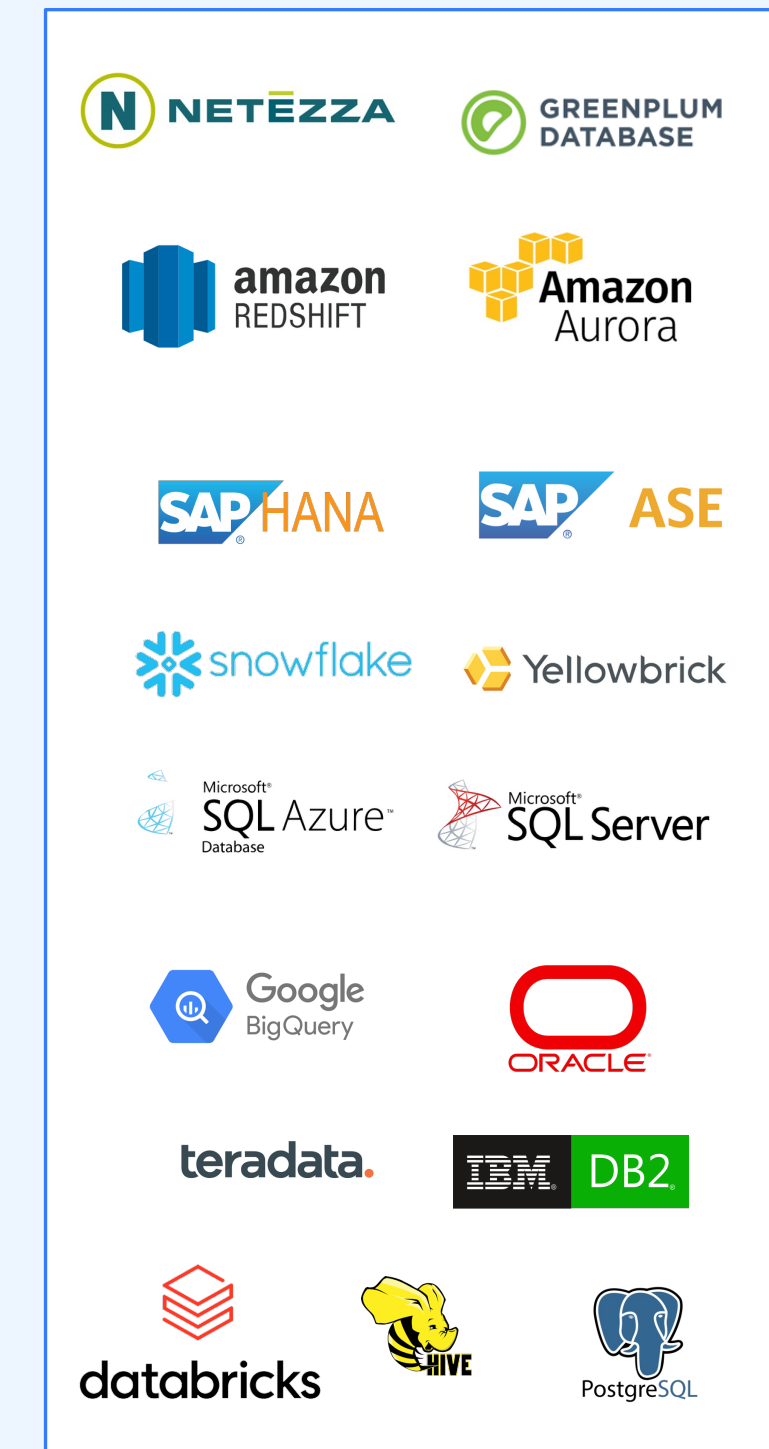
Data Sources



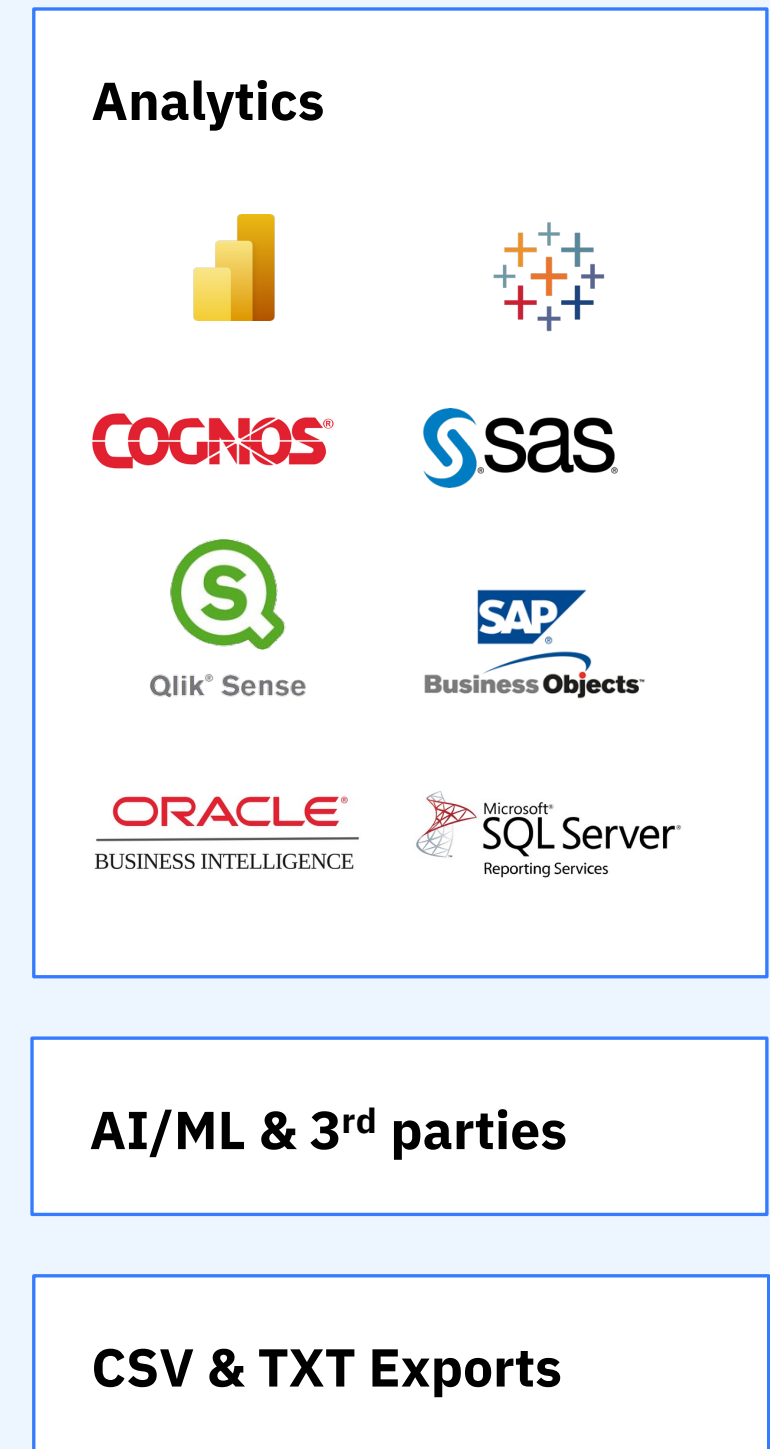
Data Integration



EDW / Lakehouse



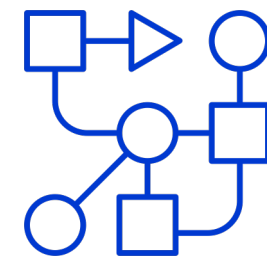
Consumption



IBM Manta Data Lineage



Core Use Cases



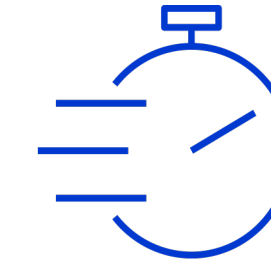
Impact analysis

Diagnose issues and discrepancies in data, analytics and AI Training Data before they occur



Root cause analysis

Gain greater visibility into the history of changes to enable faster issue resolution



Faster migrations

Removal of manual tasks. Auto scan to-be-modernized systems



Cross technology lineage

Show data's journey clearly for all levels of the organization



Regulatory compliance

Meet regulatory requirements to avoid non-compliance penalties



Retention of data engineering talent

Automate routine and manual tasks and enable self-service



Data Operations

“Prior to Manta, end-to-end impact and lineage analysis for our Enterprise Data Warehouse was not feasible. It took 6 months to perform a table-level dependency analysis on our EDW and Data Marts. With Manta, that and more was available out-of-box. Effort for analyzing impact of a source system change has decreased by at least 90%, from hours to minutes (or seconds).”

BMO



Data Migration

“During a data migration project, our team used Manta to find 1,200 downstream dependencies from 13,000 columns. Without Manta, this scan would have taken 10-15 minutes per column, totaling 2,200 hours. Instead, it took just seven hours, overnight. Even more impressive is our partnership. Manta's willingness to reprioritize their development to accommodate our goals has been tremendous.”



Eliminated Outages

“Once we've been notified of the upgrades in our non-production environments, we run a scan through Manta to see if there will be any downstream impacts. If there will be, we send them to our developers to make changes before those impacts affect our end users”

T-Mobile™

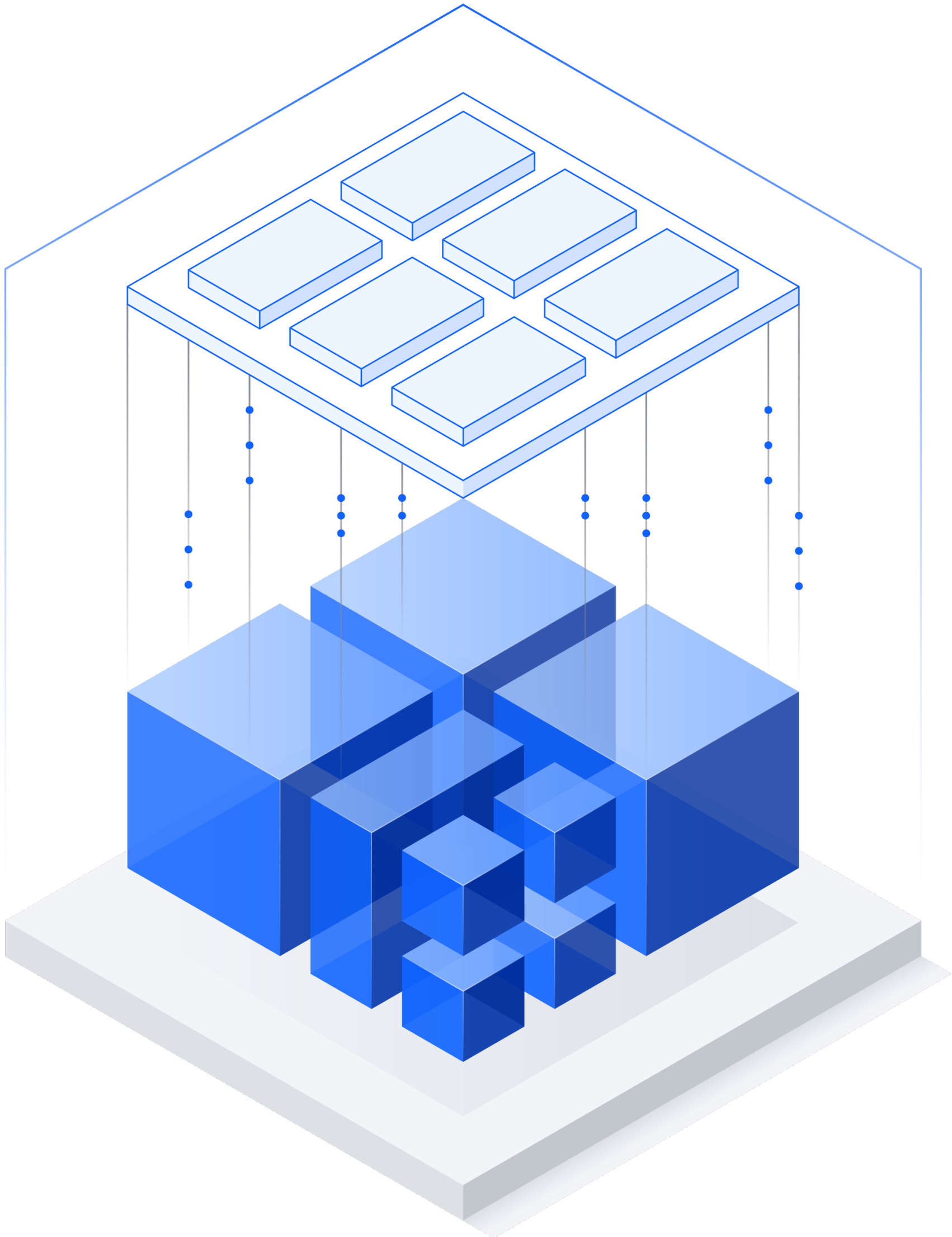
Regulatory Compliance

“Adhering to government regulations, such as SOX, is of chief importance to T-Mobile. To ensure compliance, we need a complete view of our data. By implementing Manta, we get detailed data definition language (DDL) and data lineage in one easy-to-navigate interface, as well as databases we can re-scan to capture any changes.”

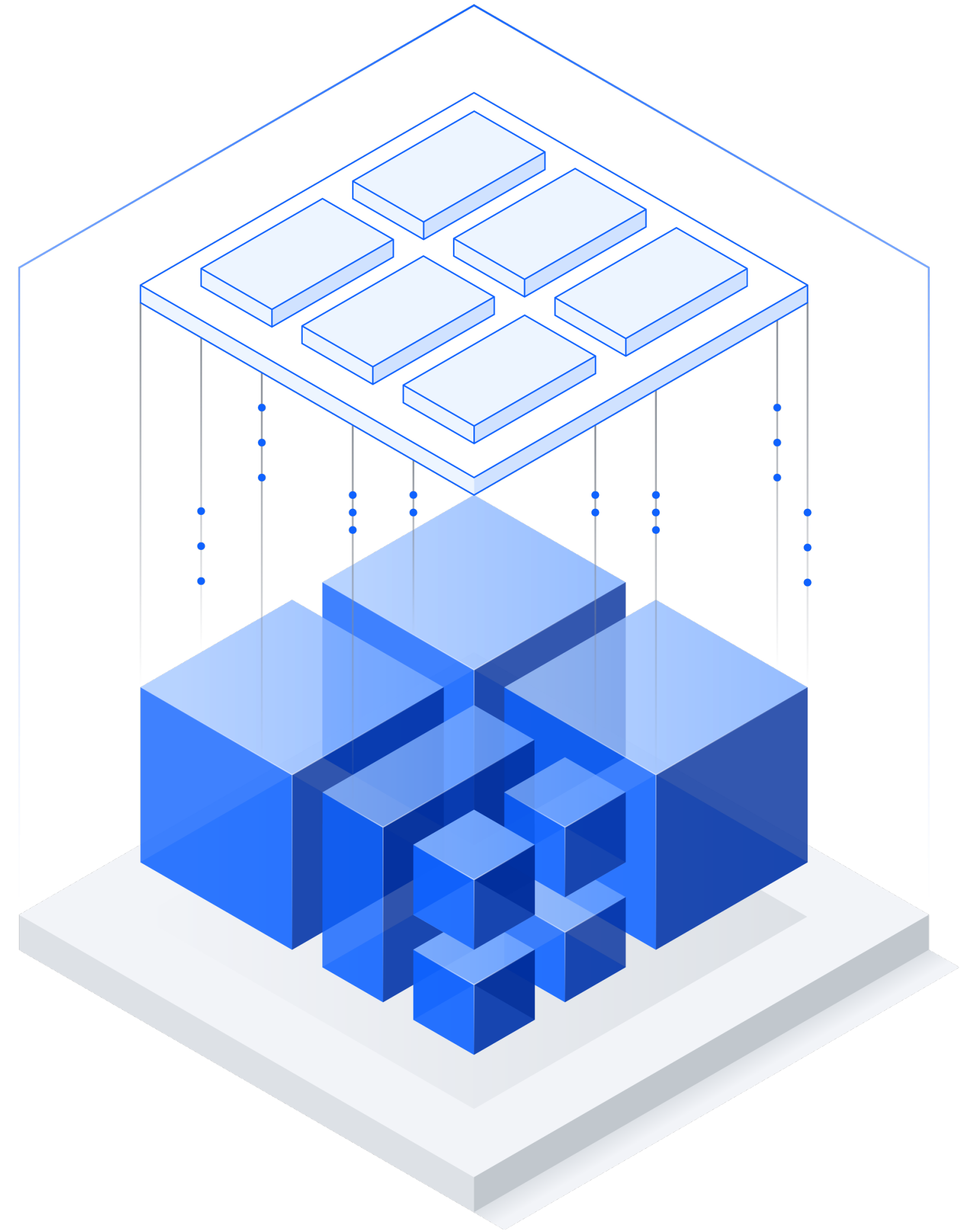
Gartner®

Gartner Market Guide for Active Metadata Management: [Link](#)

Live Demo



Questions & Answers



Thank you

If you'd like to learn more about our solutions, we'd be happy to connect with you via email or phone, just let us know via this form - [LINK](#)