FOURTH - IR
APPLIED INTELLIGENCE

4th- IR Virtual Systems Integrator

Expand the scope of Data lineage and reduce manual mapping

The customer service landscape

Data lineage yields an overview of the entire mapped data 'route', a point-to-point audit trail for data which is crucial for compliance with regulations. Artificial Intelligence empowers Data lineage in order to obtain a visual overview of the complete journey of data – tracing data quality issues and errors to their origin and performing analysis. Data lineage helps identify discrepancies and data incompleteness in a timely manner, helping organizations gain a sense of direction and react to issues before they become a problem.

AI and machine learning play a crucial role in elevating data productivity and management. Traditional approaches to data management such as manual mapping are inefficient, with little or no end-to-end metadata visibility and limited automation. AI is applied to automate and simplify data management tasks, resolving challenges.

The Virtual Systems Integrator applies AI to analyze the lineage and metadata, mapping similar patterns in the data.

Facts & Figures

80% say their organizations do not publish information about data provenance or data lineage.

More than **60%** say there are too many data sources and inconsistent data.
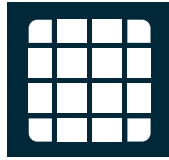
44% say that they had too few resources available to address data quality issues.

Sources: 'O'Reilly State of Data Quality in 2020'

Challenges tackled by the 4th – IR Virtual Systems Integrator

- **Inefficient Data Architecture**
  Multiple data stores with no common data model, legacy systems, complex lineage
- **Lack of front-office controls**
  Poor quality of data capture at system of origin with limited validation
- **Lack of attention on the value of Data Transformation**
  Data seen as an IT issue, not a valuable business asset
- **Gap Stitching**
  Mis-handled manual gap stitching exacerbates errors and data quality

Features

Pattern Detector
Identifies patterns, relations and clusters in data

Dependency Parser
Recognizes semantic and contextual dependencies

Anomaly Detector
Identifies deviations in data points and events

Gap Stitcher
Recognizes and presents solutions to lineage gaps

Advantages

Data Transformation

Corporations can comply with regulations by contextualizing their data around key business drivers

Data Governance

Accurate, complete and trustworthy data is used to empower business decisions and extend reach

Regulatory Compliance

Regulatory compliance efforts are supported by tracking how data flows through systems from source to destination

The Virtual Workforce of the Future

We're unlocking the collaborative intelligence between humans and machines to transform the future of work, so every company achieves competitive advantage by leveraging Artificial Intelligence.