Why data validation is critical to your analytics maturity

Data is the lifeblood of every organization. With the advent of digital transformation, companies have access to more data than ever before - but without the means to collect, verify, analyze and utilize that data, more will not necessarily mean better.

While today's organizations may deploy data engineers to manually wade through libraries of structured and unstructured data, the 2025 model will rely heavily on AI and automation to take care of the heavy lifting. However, more than 87% of organizations are classified as having low business intelligence (BI) and analytics maturity, according to Gartner, Inc.; a big obstacle for enterprises hoping to exploit data-powered technologies such as machine learning (ML) and deliver greater business impact.

To improve their analytics maturity, data and analytics leaders should retire legacy IT infrastructures in favor of integrated data management platforms that can support essential technologies like data validation solutions.

Improving analytics maturity with data fabrics

To ensure you have all of the elements needed to deliver great data to your business, a holistic enterprise data management (EDM) framework is a prerequisite, and this strategy must take data architecture into account.

Data architects and engineers, responsible for visualizing and designing these frameworks, require an advanced approach to data orchestration to accelerate the ingestion and preparation of data, and effectively operationalize collected data.

During the data orchestration process, companies often have data coming from hundreds of different sources, ranging from cloud warehouses to on-prem databases or data lakes, before making it available to data analysis tools. Where there is disparate data, there is a need for data standardization.

Integrated analytics platforms like a data fabric can support operational and analytical workloads, deliver end-to-end data management capabilities and support key data management technologies including, data catalog, data preparation, data orchestration and more.

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> **Data will be embedded in every decision, interaction, and process in three years' time.**
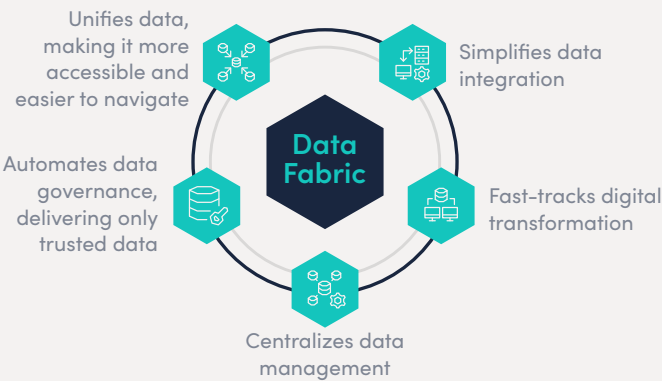>
> McKinsey

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> **By 2024, 25% of data management vendors will provide a complete framework for data fabric – up from 5% today.**
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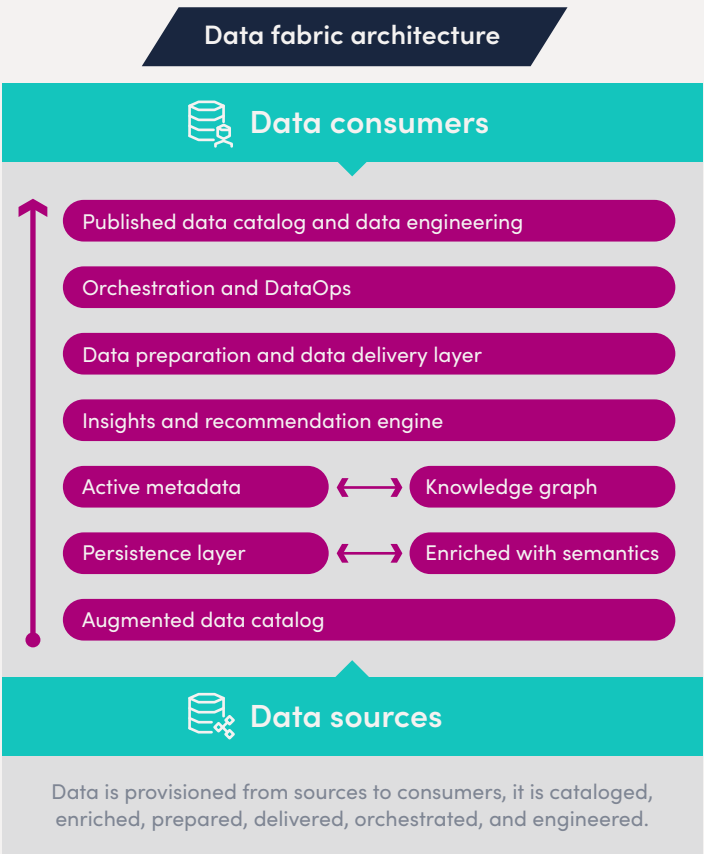> Gartner

A data fabric ensures any data, on any platform, from any location can be successfully combined, accessed, shared, and governed. Introducing a data fabric to your organization can yield the following results:

Unifies data, making it more accessible and easier to navigate

Simplifies data integration

Automates data governance, delivering only trusted data

Fast-tracks digital transformation

Centralizes data management

Data Fabric

While a solid technology base is needed to truly deliver business value through data fabric design, there is one component missing to enable thorough and effective analytics reporting: **data validation software.**

Data fabric architecture

Data consumers

Published data catalog and data engineering

Orchestration and DataOps

Data preparation and data delivery layer

Insights and recommendation engine

Active metadata ⟷ Knowledge graph

Persistence layer ⟷ Enriched with semantics

Augmented data catalog

Data sources

Data is provisioned from sources to consumers, it is cataloged, enriched, prepared, delivered, orchestrated, and engineered.
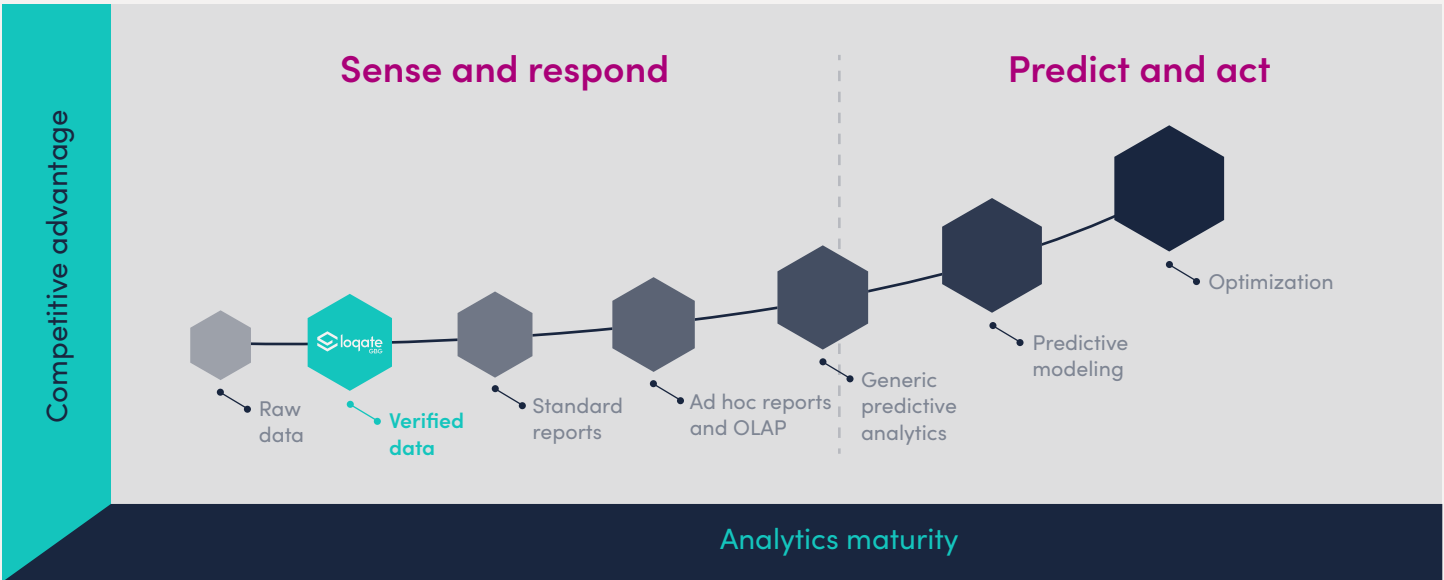
Data quality in data analytics workflows

In truly data-driven organizations, business units formulate their financial and marketing decisions based on the output from the analytics team. If the data were unverified, these decisions could likely be the wrong ones.
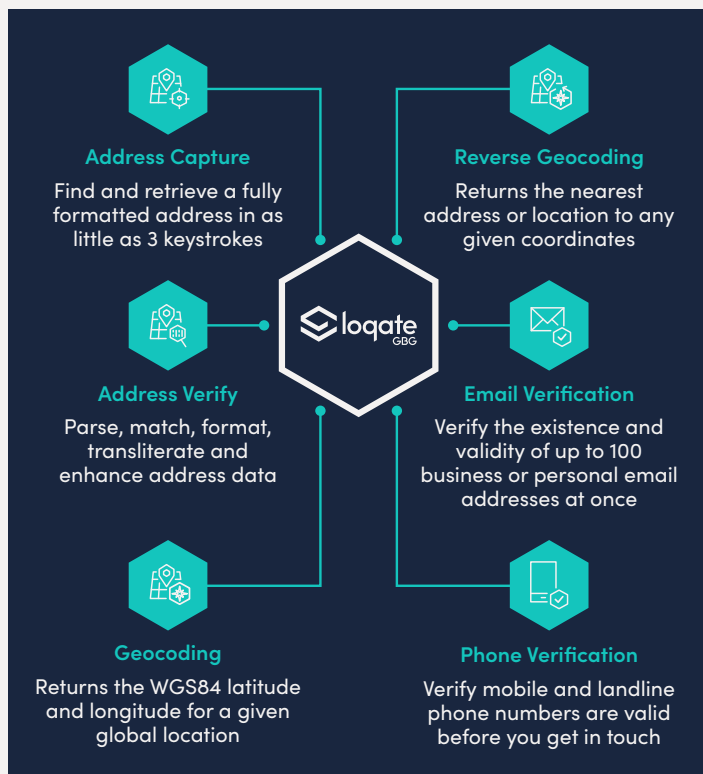
The main areas of data quality vulnerability can be alleviated by leveraging data verification technology in your EDM framework and data fabric architecture. A comprehensive data quality testing layer will ensure accurate and valuable insights no matter what upstream challenges occur.

Clean and verified customer data, especially address, phone and email records, are key data attributes needed to underpin your analytics tools, deliver efficiency savings and raise your analytics maturity level.

Sense and respond

Predict and act

Competitive advantage

Raw data

Verified data

Standard reports

Ad hoc reports and OLAP

Generic predictive analytics

Predictive modeling

Optimization

Analytics maturity

Designing your data fabric with Loqate

High-quality data is the fuel that drives your organization's analytics maturity objectives and businesses wanting to deliver and deploy accurate insights must power their data fabric with quality records.

Address Capture
Find and retrieve a fully formatted address in as little as 3 keystrokes

Reverse Geocoding
Returns the nearest address or location to any given coordinates

Address Verify
Parse, match, format, transliterate and enhance address data

Email Verification
Verify the existence and validity of up to 100 business or personal email addresses at once

Geocoding
Returns the WGS84 latitude and longitude for a given global location

Phone Verification
Verify mobile and landline phone numbers are valid before you get in touch

Loqate's data verification solutions integrate seamlessly into the flow of your data fabric to verify, standardize and enrich existing and newly entered data. Featuring real-time capabilities for address, email, and phone data verification; Loqate works by cross-referencing, combining, formatting, and standardizing data from multiple sources within individual countries to provide customers with access to the world's most comprehensive and detailed repository of global address data.

We deliver this complete solution through several easy-to-integrate, customizable APIs, making integration as simple, fast, and tailored to your business needs as possible.

By partnering with Loqate to support your EDM framework and enhanced data fabric, your organization can benefit from:

- Maintained data integrity across cloud, on-premises, or hybrid applications
- Improved data analytics and visualizations
- Reduction in costs of unverified data correction
- The ability to mitigate compliance risks when building and utilizing data fabrics with AL/ML-driven data validation and data enhancement capabilities

Why Loqate?

We are our partners' location data expert so they don't have to be. Trusted by industry leaders worldwide, Loqate partners rely on our Global Address Verification Solutions and benefit from our singular focus on developing leading addressing technology and premium reference data to solve their customers' address data quality challenges.

Learn more about how integrating Loqate's verification services into your data architecture can help deliver high quality data to your data fabric ecosystem and enhance your EDM framework.

| Speak with our Partner Team | Explore our Global Partner Program |

The best global address data powering the only complete address verification solution on the market

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