



Assessing Your Place on the Data Maturity Curve

11 Questions to Help You Map Your Data
Strategy in the Age of Enterprise AI.





The Data Maturity Curve

A proactive data strategy could mean the difference between survival and failure for data-intensive industries; as data volumes grow, organizations must balance data security with data accessibility. Establishing where you are – and where you want to be – on the Data Maturity Curve is a productive exercise at any stage of data estate modernization.

The Five Stages of Data Maturity:

Establish a data architecture that takes data out of siloes

Measure data quality across your organization

Ensure data is accessible to the right people at the right time, and that sensitive data is known and protected

Formalize data governance initiatives throughout your organization

Build a data culture where data is known, trusted and used

Too often, organizations take a linear outlook on data maturity. We like to think of Data Maturity as an iterative process, where gains can be made gradually, with a compounding effect. This approach is especially beneficial to smaller data teams, who can lean on their agility to make outsized progress on data strategy goals.

As organizations move through the data maturity curve, they get closer to using data as a strategic asset in AI, ML and GenAI applications.

While the depiction above provides an overview of steps in the process, it's

common for organizations to have a foot on separate stones of the pathway to Data Maturity. For example, Data Security should be top of mind throughout data estate modernization. But to fully mature its Data Security posture, organizations will need to build out data architecture and data quality initiatives to create a single version of the truth across the organization that will be accessed and secured.

In this Guide, we've compiled eleven challenger questions to help you better understand where you are on the Data Maturity Curve and where you could potentially focus your next efforts.

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Is Your Architecture Ripe for Modernization?

Ask Yourself the Following:

Are all critical data sources within the organization **integrated into a unified data architecture**?

Do you have **isolated data silos that hinder data flow and analysis** across different departments?

These questions will help you assess the scalability of your data architecture. Without a unified data architecture, your organization will be prone to shadow self-service reporting and multiple versions of the truth. Disparate data systems create a heavy load for IT and data teams, and can mire down talented data professionals with low-value query requests. Organizations can find immediate ROI in a unified data architecture with automated ingestion and query workflows that give data teams time to focus on work that adds business value. A modern data architecture will help you establish an Organization- and Customer-360 view, and will ensure stakeholders across your organization are looking at the same information.



Should You Focus on Data Quality?

Ask Yourself the Following:

Do you have **defined metrics for measuring data quality** and a data resolution workflow to resolve data quality inconsistencies?

Are you **regularly monitoring and reporting on data quality** issues across the organization?

Data Quality has always been top of mind for organizations that want to make data-driven decisions, but with the push for AI and ML applications, Data Quality is now MISSION CRITICAL. Why? ML and AI applications will use your data to train models and algorithms to help you better understand customer behavior, forecast supply chain and maintenance needs, and identify fraudulent behavior. But output will only be as good as your data, and positive and negative attributes will be compounded with enterprise AI applications. Having data quality measures in place is a start, but organizations should also have data resolution workflows in place so data quality issues can be resolved upstream and downstream of any incongruence. You should be able to answer with a resounding “YES” to these questions before taking on any AI or ML initiatives, but data quality is a foundational component of any data estate modernization initiative.



Do You Have the Right Data Security in Place?

Ask Yourself the Following:

Can the **right people easily access the data they need** to perform their roles effectively?

Are measures in place to **protect sensitive data and ensure compliance** with relevant regulations?

Data security on the Data Maturity Curve isn't about putting data under lock and key. A mature data strategy will be able to keep data secure while making it accessible to the right people. A unified data architecture simplifies the process, supporting metadata management practices that identify and protect sensitive data throughout the data lifecycle. Automation tools like ALTR make this process even easier – providing Active Data Controls in Snowflake through organization-wide policies, implementing authorization at the column and row level of data, and measuring and defining normal data usage and identify and stop abnormal queries. With ALTR, organizations can monitor data usage and consumption in real-time and receive alerts on abnormalities for faster identification, resolution and prevention of fraud and data theft by bad actors.



Does Your Data Governance Support Your Goals?

Ask Yourself the Following:

Do you have mechanisms in place to **ensure observability throughout the data lifecycle**?

Can you to **track data lineage, monitor data usage, and detect anomalies in real-time**?

Have you **defined policies and procedures**, along with specific roles and responsibilities related to data governance?

Data Governance initiatives will help you maintain the architecture, data quality and security you have worked to establish, even as your data estate continues to grow. While some of these tasks can be automated with security and access tools like ALTR, organizations should focus on data catalog practices that standardize data glossaries, add data classification and provide instant visibility into data lineage, impact analysis and usage. Ultimately, data governance should be guided collaboratively by your data practitioners – the data stewards who have the domain expertise to know how the data is used, the data owners who determine data policies and procedures, and the data custodians who have the technical expertise to execute on the technical aspects of data management.



Do You Have a Data Culture Where Data is Trusted and Used?

Ask Yourself the Following:

Are employees across the organization **educated and trained on data literacy** and the importance of data-driven decision-making?

Do employees trust the data they use, and is there a **culture of using data to inform decisions and strategies**?

A positive data culture is not built overnight; it is cultivated and earned. Healthy data cultures require executive buy-in and grass-roots adoption. A positive data culture is self-supporting, as increased adoption provides additional data points on data popularity and usage. Conversely, negative experiences with data trustworthiness can sink even the most stalwart data initiatives. Consistency is the key to sustaining a data culture where data is trusted and used. This can be achieved by making sure everyone in your organization is using the same language, with a data dictionary that defines data values and usage. Additionally, your organization should support robust data usage with tools that provide observability and troubleshooting upstream and downstream of data usage so data is always available and disruption is minimized.

Data Maturity is not linear.

Your data management continues to grow in complexity and opportunity with your data estate. If you need help getting started, Passerelle offers complimentary Data Maturity Assessments. During your 90-minute assessment, we will help you determine your strengths and quick wins you can use to bolster your data maturity. Ready to get started? Contact us today.

