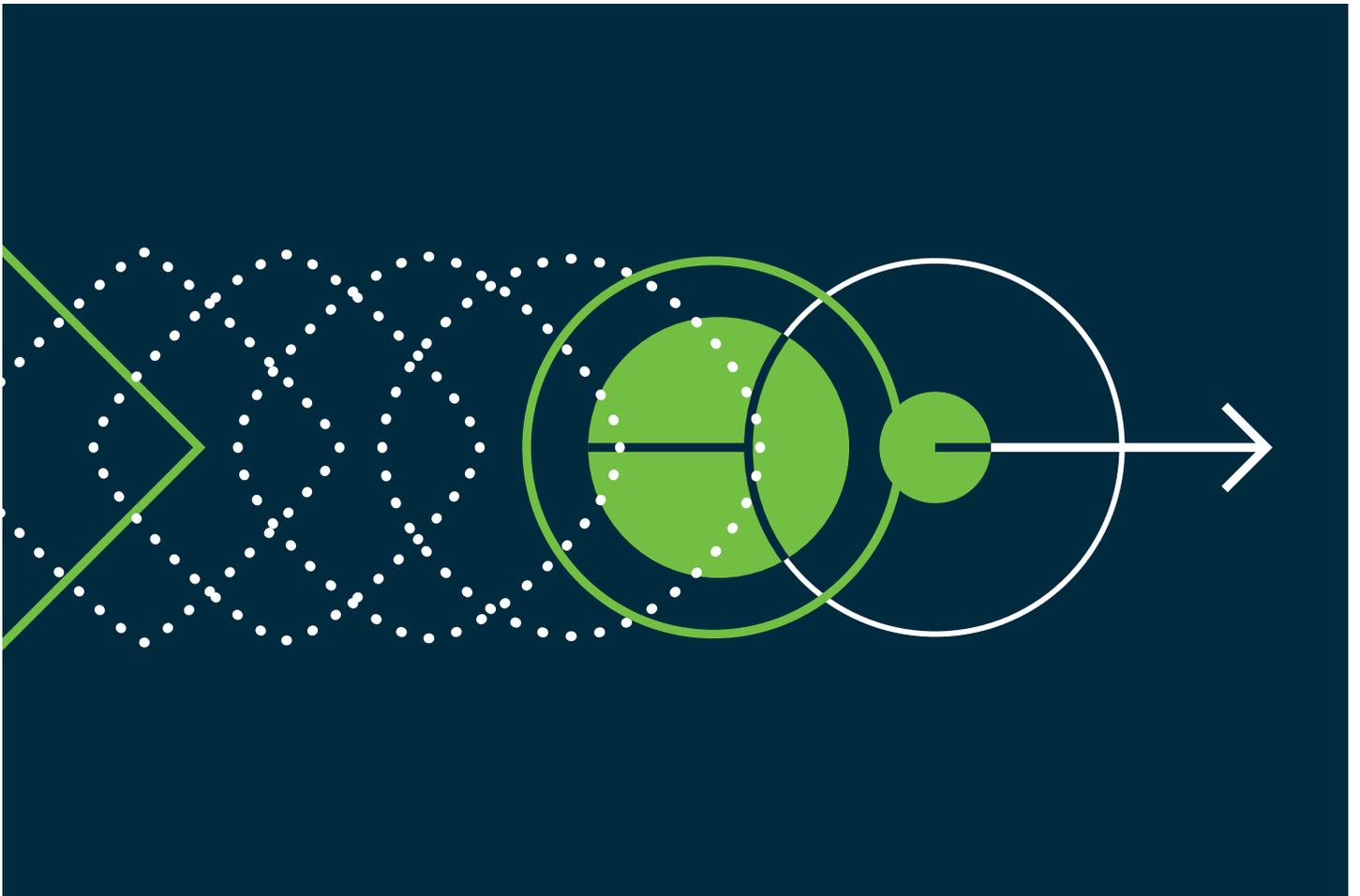


The path to data modernization

Unlocking more value from your data



Introduction

The mountains of data companies deal with today did not appear overnight. The digitization of business information started with punched cards of data, small bits of data that could be aggregated to direct business functions. Gradually, software applications grew, allowing for input, retrieval, even analysis of larger but manageable nuggets of information.

Over time, those manageable nuggets grew much bigger and more difficult to manage. Companies developed or bought hundreds, even thousands of applications, each incorporating and producing voluminous business data, stored in the application's silos.

While unwieldy and often difficult to access, the business information stored as data in those silos can be very valuable. The data represents insights into everything the enterprise does - customer information, product data, historical trends, wins, losses, etc. Used correctly, it can drive business decisions regarding product development and production, customer outreach, market strategy and more. It is the sheer volume of the data that imbues it with value, but it is also what makes it so difficult to forge into useful information tools.

Data modernization moves the data from these silos into a common repository, typically a cloud-based data lake. This is an important and necessary step and can bring significant benefits in security, agility and cost savings. But simply dumping data into a data lake does not solve the problems inherent in the aggregation of data from many different sources. It's like throwing coins and bills of different currencies together in your giant piggy bank. It's nice to have all that money, but now it's all mixed together, and you have no easy way of knowing the true value of your cash.

You need meaningful information about the data in your repository. You need to know where it came from, how its value is derived, how it correlates and compares to other relevant data in your repository. Only by establishing these connections and carefully inventorying what you have can really understand the wealth your data represents.

Data modernization

From silos ...



To a common repository



Results in increased:

- Security
- Agility
- Cost savings

“You need meaningful information about the data in your lake.”

To build a functional, modern data environment, you need a holistic approach that does more than just move your data.

A holistic approach to a modern data environment requires:



Data governance to help you understand and find meaning in your data



Data catalog to inventory and organize your data and make it accessible



Data privacy to operationalize the discovery and protection of sensitive data



Data lineage to map relationships between data and show how data flows and transforms from system to system



Data quality to identify anomalies or errors and ensure users access only reliable, complete and accurate data

These tools provide the understanding and insights that turn your data into an asset to drive better informed business decisions.

Mining the data

In order to mine this data for the sort of business intelligence that can provide real value to your enterprise, you need to overcome the fragmentation that is inherent to data by its varied origins. The data in your environment is often defined by the software that created it, stored in the software’s affiliated repositories, and accessed through the software’s specific interface.

Making this data available enterprise-wide is the goal of any data modernization effort. But to make this data usable, organizations need to provide users with the ability to easily find, understand, trust and access it.

To make data usable, focus on:



Quality and accuracy

Trust in data is critical. Employees need to have confidence that the data they are using is complete, reliable and accurate.



Visibility into source data

Understand where your data has been and where it is being used. When data is shifted from siloed repositories to a single data lake, its initial source can be harder to derive. Look for a solution that allows you to easily integrate and ingest data from all your data sources. Catalog this data to provide one place for your employees to go to easily search for and understand your data.



Lineage

Data isn't static. It is constantly moving through systems and processes within an organization. Having insight into how data is being transformed or modified is an important aspect of ensuring quality and accuracy.



Governance

Provide standardized definitions, metadata and other information to ensure that data is relevant. Ensure all data in the environment is secure, valid and available throughout its life cycle.



Privacy and security

Who has access to what data? Even though all the data can be made accessible through a cloud-based lake, data access control needs to be maintained. Look for a solution that ensures access controls are enforced which also allows authorized users quick and easy access to data as needed.

Getting started

There are a number of preliminary steps that can greatly increase the chances that your data modernization effort will succeed. Your investment is likely to be substantial, so before you start building your new data environment and moving data to a lake, carefully plan what you want your finished product to look like and how it should function.

To do this, take note of the following steps:

- Align strategic initiatives with key stakeholders
- Get business sponsorship and alignment
- Embrace data transparency
- Break your data modernization initiative into smaller, agile sprints and focus on user needs and quick wins
- Empower users to drive data literacy

Let's look at each of these preliminary steps in more detail.



Align strategic initiatives with key stakeholders

Data modernization efforts need to align with strategic initiatives across various teams within an organization. Aligning data modernization priorities solely with IT requirements is a mistake. Technology decisions need to be aligned with the needs of business users as well.

What should you do?

Create a map of strategic initiatives across groups. Consult with finance, HR, and sales. Identify the initiatives with the owners. Create a Business User Council to define how your data data modernization initiative should be approached. Have your Council review modernization initiatives to make sure they align with business requirements and goals.



Get business sponsorship and alignment

Seek business involvement and approval before developing any new processes or tools. Securing executive sponsorship and support, bringing leaders together in a collaborative fashion and focusing on the data and data that matters – will ensure your data modernization project has a greater chance of success.



Embrace data transparency

Understand where data is coming from. Decide if all data should be moved simultaneously. Remember that users don't need access to all available data. They only need access to accurate data that is relevant to their job. Dumping irrelevant, outdated or inaccurate data into the cloud pollutes it and will inhibit usage.

Providing users with comprehensive visibility into all relevant data with full business context – where it came from, who owns it and who uses it – will instill confidence and trust in it and promote usage.

What should you do?

Carefully analyze data sources to confirm they are accurate, timely and add value to your data lake.



Break your data modernization initiative into smaller, agile sprints and focus on user needs and quick wins.

When you let users drive the prioritization of modernization efforts, they can help you chunk this initiative into smaller, more manageable components. Small sprints can lead to big successes.

Treat your data modernization project as you would other large-scale, agile development initiative. Leverage your users to identify individual critical processes or reports to prioritize. Roll out these smaller modernization components according to their needs. Continuously gather feedback from end users and project stakeholders to measure results.

What should you do?

Treat each “micro” project as an agile sprint and set up weekly milestones to capture user feedback as the project progresses.



Empower users to drive data literacy

Shifting your data to the cloud increases its availability, but it doesn’t provide the context that allows business users to understand and use data appropriately. Increase your organization’s data literacy by providing users with rich context and meaning around data. Establish a centralized bank of data assets searchable by common business terms. And use machine learning to make data easier to use and understand.

Context helps users understand what the data is and whether it is relevant for their needs. Additionally, help foster greater collaboration and use of your data, by working to provide self-service, intuitive access to trusted information in one location.

What should you do?

Implement a data intelligence platform with integrated data catalog and data governance capabilities that allows users to easily collaborate and create a shared language for data assets so that everyone can operate from a single source of truth.

Get more value from your data modernization efforts

With the proper preparation and tools, your business has the power to find meaning in data as you modernize. Enterprise-wide access to your data will give business leadership insights to improve the quality of their business decisions. It can further increase productivity by giving every person in your organization fast and easy access to the data they need to perform their work.

But merely pooling your data in a cloud-based data lake does not inherently provide these valuable benefits. Because this information still lacks the context and trustworthiness needed to provide enterprise-wide insights.

To get the most out of your data modernization efforts, you will need a unified, cloud-based platform that focuses on making data accessible and reliable, while maintaining compliance and security.

The Collibra Data Intelligence Cloud platform can help unite your entire organization by delivering trusted data for every use, for every user and across every source. We bring flexible governance, continuous quality, and built-in privacy to all your data, so you not only know what you have, you understand what it means and can be confident you're using it in the right way. And no matter where your data is stored or who needs it, your team can easily access and always trust it.

With Collibra, your entire company can work with the same set of information—creating the critical alignment that accelerates workflows and delivers better results faster as you modernize your data in the cloud.



Data
catalog



Data
governance



Data
lineage



Data
quality



Data
privacy

“With the proper tools, your business has the power to find meaning in data.”

It's not as daunting as it might seem

Data modernization is a costly and time consuming endeavor for most organizations. Today, many initiatives fail due to poor planning and poor governance. Because, without the right approach, data is often not easily searchable, understood or trusted.

So, be sure to set your organization up for success by working with end users to define the optimal solution, by turning this large endeavor into smaller agile projects and by incorporating a data intelligence solution into the mix that allows business users to easily find, understand, trust and access the data in your lake.

 **If you are interested in learning more, please visit our website try us at collibra.com/try-collibra.**