

Ready for Data
Transformation
but Don't Know
Where to Start?
Start Here.

 ModerneBook



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Introduction

Many companies, especially small to mid-sized, understand the value of data and want to transform their business as many successful large companies have done. However, it can be difficult to find a starting point.

Coming from a lower level of data and analytics maturity and with smaller budgets, less staff, and less experience is a daunting challenge. Many companies get paralyzed with uncertainty and indecision. However, there are ways, even for companies that are not as mature in their current data practices and have limited resources, to greatly accelerate their transformations with the advantages of new approaches.



Challenges of the Typical Approach

When companies start enhancing their data and analytics capabilities, they often make progress in a piecemeal fashion. Instead of an overarching strategy and program, they target specific needs as they arise. This happens especially in smaller companies due to a lack of resources and sophistication. While the piecemeal approach helps with each immediate short-term need, it can quickly grow into an unwieldy and unsustainable mess.

Some of the problems that the piecemeal, on-demand approach will lead to over time include:

- Ending up with a wider range of software, hardware, and service vendors than is necessary or desirable
- Redundant licensing and labor fees across different departments and projects
- A myriad of point solutions that don't integrate with each other, and they all require regular maintenance
- Instead of data residing in-house, third-party vendors and consultants hold significant knowledge and control over corporate data and its usage
- Significant technical debt that is not fully acknowledged, accounted for, or understood

For companies somewhere on this spectrum, don't despair! There are options available today that can help with maximizing current investments while also laying the groundwork for future transformation.



Integrate Everything...Today

Today, even disruptive companies with smaller budgets and resource pools can get far along the path to a successful data transformation. One way to achieve data transformation is to use a data operating system, such as DataOS® by The Modern Data Company.

A modern layer over legacy systems

Instead of requiring companies to rip and replace their legacy systems, DataOS enables previous tech investments to go even further. It acts as a connective, operational layer that provides visibility and access across all corporate data — wherever it sits — to empower legacy systems to work in modern ways, right out of the box.

Intelligent data movement

Whether it's a combination of multiple point solutions, one or more data marts, and a data lake...no problem! DataOS can connect to each, create a unified library of what data each contains, and provide the ability to query and analyze that data without moving it. Moving only the data that needs to be operationalized means less risk, lower cost, and significantly more value.

Outcome-based data engineering

Business users don't need to worry about where the data is or how they can access it — DataOS handles it for them. Users define the outcomes they need and the data operating system automatically gets the required data without the need to write pipelines.

Modern composable architecture

A composable architecture allows organizations to define their data transformation. With DataOS, companies can realize a data fabric, lakehouse, CDP, or similar architectures in weeks instead of years.

With DataOS, companies are effectively overlaying an enterprise view on top of the current state.

The data operating system is a new concept, one that is built from the ground up to automate and scale many of the complicated requirements of a data transformation while keeping costs low and making use of whatever tools and platforms that are already in place. DataOS, specifically, is built on four core principles focused on enabling data accessibility, useability, and scalability.



Native Governance and Security

One of the advantages of a data operating system is that it also provides built-in security and governance to ensure that internal policies, as well as legal and regulatory requirements, are met. Instead of trying to apply governance to each individual tool or repository, granular governance controls are defined at the operating system level and then enforced enterprise-wide so that each member of the team can acquire data and take ownership, exercising data literacy without risking the fundamental quality and integrity of the organization's data. There are three distinct benefits to this approach.

Governance Is Automatic

DataOS is not a virtualization tool. It allows each enterprise to adjust the specificity of permissions at each level across the board — no more loopholes and no more forgotten back entrances. Access control happens infrastructure wide.

For small companies with relatively recent data stores, this isn't such a big deal. For enterprises with data stretching back decades, across a massive network of legacy tools and new overlays, this is game-changing.

Governance Is Flexible

Organizations using a data operating system manage a single set of controls no matter the integration. These controls are granular, happening across a department level, and adjustable down to a single cell of information.

Once the controls are chosen, they become embedded at the data layer no matter how complex. No one gets around, and nothing is left to chance. Now, organizations have full control over even the most complex data while unlocking as much as they can for your departments to use.

Governance Is Inherent

These controls become part of the operating system itself, making DataOS a security-first option and ensuring governance becomes an integral part of the data itself — no amount of movement erases the integrity and protection of the original data.

Because the data operating system doesn't rely on exchanging copies to work, the streamlined network of original data is always available. There are no copies to control or track. There's nothing to get lost or misappropriated into one of the thousands of individual programs installed with (or without) IT knowledge.

Once a data operating system is in place, organizations can easily upgrade and replace the underlying components at their own pace. That's the beauty of this approach — companies can integrate as-is whatever messy mix of legacy technologies they have today, which accelerates value and reduces complexity. Once the initial integration is done, replacing the underlying components is straightforward. Over time, the data transformation will be complete. Instead of waiting for the transformation to be complete to modernize their approaches and get more value from their data, companies can start modernizing even as the transformation proceeds.



Low Risk and Low Cost

The best part about the data operating system paradigm is that it comes with low risk and low cost. A data operating system can literally be deployed in weeks to achieve the same objectives that cost months and years through point solutions. Companies will quickly be solving business problems and attacking use cases that were previously impossible given their disparate systems. This isn't magic. It is an approach that takes full advantage of the state-of-the-art tools and technologies available today. It is a different way of thinking about and approaching data management, data transformation, and analytics.

Visit our website today and learn more about how DataOS can help you modernize your legacy infrastructure without ripping and replacing it all.

[Visit Our Website →](#)



About DataOS®

DataOS is an operating system that consists of a set of primitives, services and modules that are interoperable and composable. These building blocks enable organizations to compose various data architectures and dramatically reduce integrations. Enterprises can have the same data-driven decision-making experience akin to data-first tech companies in days and weeks instead of months and years.

About The Modern Data Company

Founded in 2018, The Modern Data Company began with the realization that enterprise-wide data access has been siloed. Data engineers and database administrators have been the longstanding data gatekeepers who funneled data to analysts and data scientists. We aim to change that by freeing enterprises to make better data driven decisions by democratizing access to data. When all employees, irrespective of their technical skills or background, can easily explore and analyze enterprise data, then both productivity and market expansion are realized at a faster pace.



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