



Data is an Asset. Treat It as Such.

At a Glance

Data is an asset when it is built to bring value. Digital transformations that champion data meet and exceed ROI expectations. Smart CIOs treat data as they would treat their careers — with diligence, sustainability and effort. Organizations must solve for digital transformation by understanding and maintaining their greatest asset — their data. To maintain the value of data during enterprise transformation, organizations must:

- Understand the organizational strategies for driving value from data
- Implement a data workstream
- Understand the past to arrive at a desired future state
- Focus on people to extract legacy information
- Brainstorm new ways of working

Data is the building block of business. If a company loses its data or if its data is compromised, it could significantly damage the business in terms of financial performance, brand reputation or loss of customers. Executives understand that data is an asset when it is transformed to bring value. Whether an organization leverages data to fundamentally run its business, the data is a byproduct of conducting day-to-day operations, or the business sells the data assets as a unique product, data must be managed, protected, traced and updated. The importance of valuable data is even more amplified as an enterprise undergoes digital transformation.

CIOs must be deeply involved in unlocking and protecting the organization's data to gain its full value as an asset. Data that is not properly integrated will cause enterprise transformation to fail. CIOs who want to modernize their application architecture or any other architecture must have a data structure, know where their data originates, and understand its lineage and how it interacts with operational flows.

Fragmented and uncontrolled data impede technology modernization. Thus, fundamental data challenges must be addressed to enable full value. When an organization's data is scattered, vague and unmanaged, time and money must be spent correcting these deficiencies prior to technology modernization. While many organizations have access to sufficient technology, they do not have a process, discipline and the fundamentals to leverage data as an asset, and therefore aren't getting the anticipated return on investment.

Understand the organizational strategies for deriving value from data

The purpose behind collecting and retaining data is to meet business objectives. A key for driving and treating data as an asset is to first value that asset by understanding how it is used within the organization. IT professionals must fully understand the business strategy and then provide guidance for how to collect, store and protect the data assets needed to drive to that strategy. In any digital transformation, data is essential, so clearly this alignment must occur.

Implement a data workstream

It is important that data not be an afterthought in technology modernization efforts. On the contrary, organizations must understand the origins and characteristics of their data, including whether it contains personally identifiable information (PII), as well as the requirements to manage it. Organizations should develop and implement a dedicated data workstream, including integrating and harmonizing data from different systems and addressing data timing, including real-time, near real-time and batch data. Organizations that do not develop data as a workstream will reap subpar results — at best — from their modernization efforts.

Understand the past to arrive at a desired future state

CIOs must understand their organization's legacy architecture and desired future state, and they must bridge the gap between the two. Technology environments are layered with multiple years of various technologies. As an organization implements new technology year after year, a mixture of techniques and programming are deployed, each of which pose unique data challenges. Disassembling old data structures and reassembling them for a future state requires unique skill sets, including a strong understanding of legacy systems.

Focus on people to extract legacy information

The talent shortage of workers with experience in legacy systems is a real and prominent challenge for many organizations. As an aging workforce looks toward retirement, organizations risk losing valuable information about their legacy systems, and will be challenged to find replacement candidates who can understand why legacy systems were built the way they were (many decisions were made for good reasons but caused complexity). To proactively address this problem, CIOs should implement focused programs to gather institutional knowledge and legacy systems information from internal subject matter experts while they can, and then should use data governance techniques to persist this knowledge. This will ensure the organization is in a good position to implement new technologies.

Brainstorm new ways of working

The old way of working, now obsolete or becoming obsolete, applied a siloed resources method where various resources (data analyst, mapper, architect, ETL resource and API developer, etc.) were used to perform tasks. Today's organizations are looking for new ways of working and are engaging full-stack developers and engineers who can perform a broad range of technology skills. Companies want a single team that can build and have security overlays and operations — without calling in specialized resources at every turn. This makes it possible to continuously develop and build applications while incorporating security and operational aspects throughout.

Companies can adopt new ways of working by addressing remote working arrangements and building best-of-breed technologies into their models. Companies should also seek out resources with the right skill sets in the right locations and for the right price to address data DevSecOps or continuous development, continuous security, continuous improvement and continuous operations.

Holistic collaboration brings company-wide modernization

Collaboration *across* the enterprise is essential to optimizing the modernization of the organization. Addressing only one function or department's transformation may be detrimental if consideration is not given to other functions or departments. Therefore, a holistic collaboration brings company-wide transformation, as opposed to only partial transformation.

C-suite members each have unique concerns about the integrity of data and the extent to which it impacts their respective functions:

- **Chief risk officer (CRO)** — The integrity of the data being applied in risk models is of utmost importance to the CRO because if the data is not reliable, true risk cannot be properly determined.
- **Chief financial officer (CFO)** — Financial reports, including audited financial statements for public companies, are based on data in the general ledger. To the extent the data is not reliable, there could be severe consequences, including financial statement restatements and inaccurate valuations.
- **Chief audit executive (CAE) and chief data officer (CDO)** — A collaboration triangle should be formed among the CIO, CAE and CDO. Their communications support the organization's audit activities as the CDO (for public companies) ensures that all controls are performing as intended (especially for compliance purposes), the CAE ensures controls are properly defined and the CIO supports the technical aspects of the audit function.
- **Chief compliance officer (CCO)** — Confirming that the right people have the right access to the right data is of utmost importance to the CCO for

compliance purposes. Therefore, understanding and securing the parameters and permissions for access to data is paramount.

What should companies do now?

To gain full value of their data, organizations must ensure that it is understood, tracked, optimized and controlled. As they move through their transformation efforts, companies should:

- Understand their data ecosystem, including where the data resides and how it is transformed and leveraged
- Understand the relative value of data within the data pipeline and eliminate data sources that are not needed for business purposes
- Know what data is being acquired from outside vendors and how it is being used internally.
- Don't buy, keep or ask for more data than the organization needs
- Eliminate irrelevant, erroneous and duplicative data from the environment, depending on the organization's industry and the level of its environment control
- Create a golden source of data across the data ecosystem to ensure accuracy and consistency

CIOs must work with leadership across the entire organization to resolve fundamental data challenges if they are to achieve a successful technology transformation. A focus on correcting deficiencies and developing a process and discipline for managing and protecting data through proper governance will ensure the organization transforms and leverages its data for maximum value.

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