A HYBRID DATA PLATFORM IS CRITICAL FOR DIGITALLY TRANSFORMING BUSINESSES

SUMMARY

Large amounts of data are created everywhere businesses operate – in clouds, on premises, and at the edge. Harnessing the value of data, regardless of location, is critical to delivering competitive differentiation. This document outlines the attributes for selecting a hybrid data platform.

DATA IS THE LIFEBLOOD OF A DIGITALLY TRANSFORMED BUSINESS

Businesses need the ability to tap into the value of all data. Capacity is limited when data are housed in disparate sources and siloed across departments. Businesses function more efficiently and can increase revenue with full access to data, regardless of location.

Data is now hybrid. No longer does data reside comfortably within the perimeter of a data center. Data exists on premises, in the cloud, at the edge, and in intelligent devices outside the organization. Hybrid data comes in different forms: structured, unstructured, semi-structured, and many formats such as text, video, audio.

EMBRACING THE HYBRID REALITY

It is a hybrid cloud world today, with most enterprises deploying workloads across private clouds and multiple public cloud providers. To capitalize on a hybrid cloud computing model, enterprises must adopt a hybrid data strategy that can collect and store data across the hybrid estate without sacrificing the vital analytics needed to turn that information into insight.

Business decisions are becoming increasingly data driven. Sound decisions come from knowing the location of all relevant data and having trust in the validity of that data. The business incentives for having an established hybrid data cloud strategy are significant and include cost savings and boosted annual revenue.

A hybrid data cloud strategy is founded on the ability to analyze multiple data sets across heterogeneous environments without having to move the data to analyze it. The

organization must embrace the notion that sharing insights is more valuable than sharing raw data. Managing the data effectively across the entire hybrid cloud infrastructure will enable reliable insights. New key performance indicators (KPIs) should track time-to-insight as the organization can now ask the right questions with the correct data and quickly operationalize the answers.

A few years ago, it would take months to develop just one data-driven use case, such as Customer 360. Today, businesses can generate hundreds of use cases in weeks with an established hybrid data platform.

Customer experience is king and the lifeblood of most businesses. Great experiences often depend on the availability of real-time insights "at the moment." Retailers, for example, want to present customers with personalized offers while still in a store, not three days later. This capability requires instant access to data and multi-function analytics across multiple platforms, including CRM, inventory, and promotions. A hybrid data platform makes this possible.

THE HYBRID DATA PLATFORM

A hybrid data platform enables enterprises to drive innovation by seamlessly collecting, storing, preparing, analyzing and publishing data. All data types – structured, semi-structured, or unstructured – should be easily accessed and analyzed whether on premises, in a public cloud, in a private cloud, or at the edge.

Consistent security and governance are critical to ensure users have proper access to data, a fundamental requirement for the mobility of data and services. Security and governance should be metadata-based and deliver persistent context across all analytics and public and private clouds. Public cloud security models may vary; a hybrid data cloud should centralize security and governance across all environments and audit user activity and access to meet compliance requirements.

With a hybrid data platform, data and workloads can move quickly in any direction between clouds without costly rewrites and changes. The movement of existing data should include associated metadata. This holistic approach enables organizations to move workloads without compromising security and compliance.

A hybrid data platform should include data services covering the data lifecycle from ingestion to transformation, warehousing, and machine learning. Data services must be

portable across clouds and work with structured, semi-structured, or unstructured data in all modes, whether real-time, streaming, or batch.

Users and developers have a simple, consistent user experience with a unique identity for each user. The platform should be open and extensible and ready for the future to extend and adapt to new clouds, data types, and data services.

WHAT TO LOOK FOR IN A HYBRID DATA PLATFORM

A business should look for a hybrid data platform that helps quickly unify data and turn it into business value. For enterprises focused on digitally transforming, that also means planning for future data, use cases, or deployment models.

While there are significant security and technical requirements that every organization must evaluate, the basic requirements for a hybrid data platform are straightforward:

- Provide the same experience across the entire data lifecycle on any public or private cloud.
- Move data and workloads across the various parts of the hybrid cloud platform simply – ideally to/from any data-driven application.
- Include data governance for all data (this is important!), meet security and compliance requirements – and be flexible to adapt to changes.
- Be open and work efficiently with other data sources and systems in the business architecture, but it shouldn't require too much manual integration.

A hybrid data platform should also be an end-to-end experience that can unify and connect data across an enterprise. If a data platform is only a solution within a part of the digitally transformed business, it leaves gaps and opportunities on the table.

WRAPPING UP

Any data strategy designed for agility and innovation must have hybrid at its core. Timely and accurate insights from hybrid data have the potential to change a business fundamentally. A hybrid data approach and platform places data at the center of a successful organization's strategy, operations, and execution. Regardless of industry, time to insight is a crucial success factor. Understanding shifts in industry trends or consumer preferences sooner than the competition can make a material difference in an organization's ability to compete and win in a world where everything happens in real-time.

IMPORTANT INFORMATION ABOUT THIS PAPER

CONTRIBUTORS
Patrick Moorhead, CEO, Founder and Chief Analyst
Jacob Freyman, Contributor

PUBLISHER
Patrick Moorhead, CEO, Founder and Chief Analyst at Moor Insights & Strategy

INQUIRIES
Contact us if you would like to discuss this report, and Moor Insights & Strategy will respond promptly.

CITATIONS
This paper can be cited by accredited press and analysts but must be cited in-context, displaying author's name, author's title, and "Moor Insights & Strategy". Non-press and non-analysts must receive prior written permission by Moor Insights & Strategy for any citations.

LICENSING
This document, including any supporting materials, is owned by Moor Insights & Strategy. This publication may not be reproduced, distributed, or shared in any form without Moor Insights & Strategy's prior written permission.

DISCLOSURES
Cloudera commissioned this paper. Moor Insights & Strategy provides research, analysis, advising, and consulting to many high-tech companies mentioned in this paper. No employees at the firm hold any equity positions with any companies cited in this document.

DISCLAIMER
The information presented in this document is for informational purposes only and may contain technical inaccuracies, omissions, and typographical errors. Moor Insights & Strategy disclaims all warranties as to the accuracy, completeness, or adequacy of such information and shall have no liability for errors, omissions, or inadequacies in such information. This document consists of the opinions of Moor Insights & Strategy and should not be construed as statements of fact. The opinions expressed herein are subject to change without notice.

Moor Insights & Strategy provides forecasts and forward-looking statements as directional indicators and not as precise predictions of future events. While our forecasts and forward-looking statements represent our current judgment on what the future holds, they are subject to risks and uncertainties that could cause actual results to differ materially. You are cautioned not to place undue reliance on these forecasts and forward-looking statements, which reflect our opinions only as of the date of publication for this document. Please keep in mind that we are not obligating ourselves to revise or publicly release the results of any revision to these forecasts and forward-looking statements in light of new information or future events.