The power of an

open-source approach to AI

Agencies need flexible, comprehensive data platforms and strategies to achieve the promise of Al

NE OF THE most exciting things about technology and innovation in general is the rapid pace at which new capabilities are being brought to market. When it comes to artificial intelligence, there are tremendous applications available to help agencies automate repeatable tasks and even complex activities.

Generally speaking, agencies don't have a data collection problem, but they do face significant challenges in making sense of all that data. That's where AI can help. But before agencies can apply AI, they need to start by defining the insights they want to glean from their data. What questions are they trying to answer, or what do they want to accomplish? Then they should conduct an inventory of their data — whether it's on premises, in the cloud, real-time or historical — and inspect the integrity, completeness and applicability of that data.

The next step is breaking down the physical and cultural silos that exist. Many agencies face technical problems in being able to access and enrich their data, but there's also a very real cultural problem when it comes to sharing and accessing data across some of those silos.

Therefore, agencies need to build trust for their security and governance foundations and ensure that they can access the appropriate data that's necessary to answer the questions they've identified. Once they've done all that, they can enable their teams with the training and technical resources necessary to use AI to sift through data to find the most relevant insights.

Setting new standards for IT operations

Incorporating new technology like AI requires some level of IT modernization for most agencies. Security and governance are



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key attributes of any modernization effort, but the ability to integrate new solutions into existing systems is also essential. Unfortunately, many of the government's legacy systems struggle to keep up with growing demands for storing and accessing the unstructured data that fuels AI applications.

I recently developed a forecast for top technology trends in 2020, and a key prediction is that open-source software and approaches will become increasingly important for supporting all the data center traffic that is shifting to the cloud. In addition, the operating systems and applications that power automation and AI-enabled capabilities, among others, will continue to be built on open-source platforms that set new standards for IT operations.

Agencies that have an open architecture or a more flexible and agile approach to



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IT are already seeing tremendous gains in productivity through new capabilities and efficiencies that previously weren't possible.

Avoiding vendor lock-in

From our vantage point at Cloudera, success starts with having a comprehensive and independent data strategy, which includes an enterprise data platform where security and governance are key considerations and

key attributes from the start.

There's often a rush to get new capabilities developed, and then after the fact, organizations try to backtrack and insert security and governance requirements for sensitive data. That approach is inefficient and often ineffective.

Instead, agencies can benefit by establishing a data strategy and data platform that protects them from vendor lock-in and

doesn't discriminate against any types of data. Specifically, the strategy should encompass data at rest and in motion and have the flexibility to support current and future data formats so that agencies have the opportunity and ability to achieve the promise of AI.

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