CLOUDERA

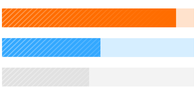
The State of Enterprise AI and Modern Data Architecture

AI promises to significantly increase productivity across industries, bringing it top of mind for enterprise business and technology leaders alike. However, many enterprises face adoption and scaling challenges due to limited and outdated data architectures. To dive deeper into this issue, Cloudera and third-party research firm Researchscape surveyed 600 IT leaders at companies with over 1,000 employees to learn about the current state of AI, the biggest challenges to AI adoption, and more.

Enterprises have wasted no time adopting AI for a variety of purposes.

According to IT leaders, **88%** of enterprises currently use AI.

The top three departments leveraging AI are:



The top benefits of deploying AI:

60% Improved customer experiences

57% Increased operational efficiency

51% Expedited analytics

Most organizations have adopted some form of AI, but many organizations have not scaled the technology.

Of the organizations that have adopted AI, more than a third (39%) **said that only some or almost none of their employees currently use AI tools.**

Top four barriers to adopting AI:

74% Worried about the security and compliance risks that AI presents

38% Don't have the proper training or talent to manage AI tools

26% AI tools are too expensive

25% Don't have the data infrastructure required to effectively power AI

The top three costs preventing accelerated AI initiatives:

50% Integration costs

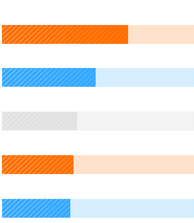
49% Data storage costs

46% Costs associated with data breaches or leaks

Limited or outdated data architecture is the biggest obstacle to implementing and scaling AI.

According to respondents, **81% of organizations store data in a private cloud**, while **58% use a public cloud**, **42% use on-premises mainframes**, **31% use on-premises distributed systems**, **29% use other physical environments**, and **19% use a data lakehouse**.

The five biggest challenges in today's data landscape:



Over half (55%) of IT leaders say they would rather get a root canal than try to access all of their company's data.

The top benefits of leveraging a data lakehouse:

33% Improved operational efficiency

22% Improved access to unstructured and semi-structured data

17% Strengthened data governance and compliance

11% Breaking down siloed data

16% Reduced data management costs

Conclusion:

The benefits of AI include better customer experiences, greater productivity, error reduction, process acceleration, workflow improvement, and more. But even with all of the excitement around AI, enterprises must navigate some difficult challenges regarding data management and data silos. AI is only as good as the underlying data, so businesses need a modern data architecture that simplifies data management and governance and provides unified self-service access to data across hybrid environments to realize the technology's true potential.

Read the State of Enterprise AI and Modern Data Architectures Survey Report