

AI InfrastructureView 2022: Standard

AN IDC SPECIAL INTELLIGENCE SERVICE

This product provides an overview of AI infrastructure adoption and trends among IT buyers via annual worldwide primary research surveys. It looks at current and future AI infrastructure investments and adoption rates, workloads, and economics by IT customers and service providers. This product will deliver key insights into challenges, considerations, and opportunities in adopting AI systems platforms and technologies. This product helps IT companies prioritize their AI infrastructure investments and offers insights on the overall impact on infrastructure decisions, workloads, personas, solution selling, open source versus commercial software markets, deployment locations, and so forth. It seeks to gain insights on the impact of machine and deep learning workflows, AI-infused applications, and analytics technologies on the infrastructure software and hardware markets in a quantitative manner at a worldwide level. Specific focus is put on the infrastructure needs of newer technologies (e.g., SAP HANA, Greenplum, Oracle Advanced Analytics), nonrelational analytic data stores (e.g., Hadoop, Spark, MongoDB, Cassandra), and continuous analytic tools (e.g., Amazon Kinesis, Splunk Universal Forwarder, Microsoft Azure Data Factory). The program also covers infrastructure needs for relational data warehouses, analytic and performance management applications, and business intelligence and analytic tools and platforms (including AI software platforms). *AI InfrastructureView 2022: Standard* includes worldwide insights.

Markets and Subjects Analyzed

- The entire AI infrastructure stack, including AI technologies (e.g., accelerators), platforms (e.g., servers), systems (e.g., storage infrastructure), and infrastructure software (e.g., operating systems)
- Computing requirements across general-purpose and accelerated computing used in support of new workloads
- Infrastructure types (discrete or converged/integrated), array types (all flash, hybrid storage, or HDD), data organizations (block, file, and object), and in-memory technologies supported for AI and analytics workloads
- Deployment location (e.g., cloud, edge, and traditional) and consumption model (traditional/as a service) preferences
- Implications of analytics on data life-cycle management use cases such as production, backup, replication, and archive
- Artificial intelligence data pipeline (edge to core to cloud)
- High-performance parallel/distributed file systems
- Autonomous infrastructure
- Accelerated computing
- Heterogeneous processor architectures

Core Research

- IDC Survey: This presentation provides a summary of results in the form of charts and figures for each survey question for easy viewing (worldwide only).
- IDC Webinar: IDC will provide a webinar as an interactive session to review and discuss the results of this study.
- IDC Banner Book: These banner books provide data results of this study across different segment views (e.g., firm size, geography, and industry; worldwide data).
- IDC Executive Summary: This summary provides in-depth analysis of the survey results and includes strategic messages, key highlights, implications, and essential guidance for AI infrastructure vendors and buyers.

In addition to the insight provided in this service, IDC may conduct research on specific topics or emerging market segments via research offerings that require additional IDC funding and client investment. To learn more about the analysts and published research, please visit: [AI InfrastructureView 2022: Standard](#).

Key Questions Answered

1. What are customers thinking, planning, and investing with regard to AI infrastructure?
2. What are the major drivers of and inhibitors for AI infrastructure adoption on-premises and in the public cloud?
3. Which financial metrics will matter in AI infrastructure investments, and how will they evolve?
4. What are the major drivers of and inhibitors for AI infrastructure adoption based on different buyer personas?
5. What are customers thinking, planning, and investing with regard to AI infrastructure technologies?
6. What are the top AI workloads and use cases today and in the future?

Companies Analyzed

This service reviews the strategies, market positioning, and future direction of several providers in the AI infrastructure market, including:

Adobe, Alibaba, Amazon Web Services, ARM, Cisco, Citrix Systems, Cloudera, Dell Technologies, Fujitsu, Google, Hitachi Vantara, HPE,

IBM, Intel, Microsoft, NEC, NetApp, NVIDIA, Oracle, Panasas, Qumulo, SAP, SAS, Salesforce, Teradata Corp., TIBCO, and WekaIO.