

Artificial Intelligence in Cloud and Enterprise Data Center Hardware Report

Part of the AI & Intelligent Automation Service Area Package

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Published On 4Q 2019

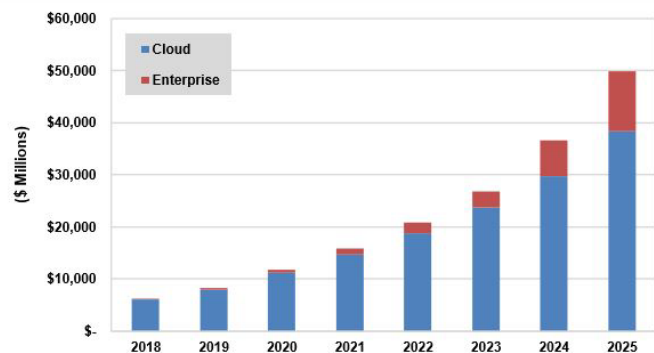
Servers, Workstations, Cards, Storage, and Networking Infrastructure: Global Market Analysis and Forecasts

The first movers in artificial intelligence (AI) have been the hyperscaler operators. This is partly because their businesses had progressed to the point where they needed AI. Google needed AI to optimize web searches; Amazon to do customization of its online retail offerings; and Facebook to enhance its activity feed, photo, and social media applications. The other reason is that the hyperscalers are the ones with the deep pockets to fund the high costs of research in AI. These companies are now attempting to democratize AI technology and make it pervasive.

Data center infrastructure, specifically computing, memory, storage, and networking, is in the process of going through a reboot to support AI. Though AI represents just a small portion of a cloud data center's workload and an even smaller portion of an enterprise's workload, it drives a different type of application profile and thus requires different architectures and components. Advances in technology have played a major part in enabling AI expansion and market penetration. In turn, AI applications are driving the development of new silicon and system architectures, storage and networking options, and delivery models. Meanwhile, Omdia's research indicates that enterprises are not abandoning on-premise computing. While the hyperscalers have been driving AI implementation in the cloud, there is corresponding demand for on-premise and colocated solutions from early adopter enterprises.

This report examines the AI applications in business, consumer, and government that are driving requirements in AI infrastructure, especially the compute, storage, and networking functions in cloud and enterprise data centers. The report also catalogs the changing nature of the market, ecosystem, vendors, and technologies, including the underlying semiconductors powering the next generation in AI. Market forecasts include infrastructure hardware spend from 2018 to 2025 segmented by region, function, chipset, delivery model, and enterprise vertical.

Cloud and Enterprise Data Center Hardware Revenue for AI by Segment, World Markets: 2018-2025



Source: Omdia

Report Coverage

KEY ISSUES ADDRESSED	COVERAGE			APPLICABLE TO
<ul style="list-style-type: none"> What is the current state of the AI market and how will it develop over the next decade? What are the key market drivers and barriers and ecosystem trends with cloud and enterprise data center hardware for AI? How will AI be implemented in the cloud, enterprise, or colocation site? What are the key technologies that will affect computing, storage, and networking in the cloud and enterprise data center? Which companies are the key players in the AI market and what are their initiatives and offerings for cloud and enterprise data center hardware? What is the size of the cloud and enterprise hardware infrastructure market to support AI, and what is its trajectory over the next 7 years? 	<ul style="list-style-type: none"> Cloud and Enterprise Data Center Hardware Revenue for AI, World Markets: 2018-2025 <ul style="list-style-type: none"> By Vertical By Segment By Region By Function By Compute Category AI Initiatives, Industry vs. Research Focus, U.S., China, and Europe: 2018 	Verticals <ul style="list-style-type: none"> Banking & Financial Retail Automotive & Transportation Telecom & Broadband Healthcare Manufacturing Consumer Packaged Goods Government Travel & Tourism Education Other 	Regions <ul style="list-style-type: none"> North America Europe Asia Pacific Latin America Middle East and Africa 	<ul style="list-style-type: none"> Cloud hyperscaler operators Colocation operators Data center server and workstation vendors Memory and storage vendors Switching, routing, and networking vendors AI semiconductor vendors Enterprises Governments and regulatory bodies Investor community
		Functions and Delivery Models <ul style="list-style-type: none"> Computing Storage Networking Infrastructure as a service (IaaS) Platform as a service (PaaS) Software as a service (SaaS) 		

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