

Global AI Server Market: Analysis
By Type (Training & Inference),
By Processing Unit (GPU & Non
GPU), By Shipments, By Region
(North America, Europe, Asia
Pacific & ROW), Size and Trends
with Impact of COVID-19 and
Forecast up to 2029

January 2024



Global AI Server Market: Coverage

Executive Summary and Scope

Introduction/Market Overview

Global Market Analysis

Regional Market Analysis

Impact Of COVID-19

Dynamics

Competitive Landscape

Company Profiling

Global AI Server Market: Coverage

Scope of the Report

Attributes	Details
Title	Global AI Server Market: Analysis By Type (Training & Inference), By Processing Unit (GPU & Non GPU), By Shipments, By Region (North America, Europe, Asia Pacific & ROW), Size and Trends with Impact of COVID-19 and Forecast up to 2029
Coverage	Global and Regional
Regional Coverage	North America, Europe, Asia Pacific, ROW
Market Influencing Variables	Growth Drivers, Challenges, Market Trends
Forecast Period of Market	2024-2029
Competition in the Market	Consolidated
Key Players	IBM Corporation, Huawei, NVIDIA Corporation, ADLINK Segments, Dell Technologies Inc., Lenovo Group Limited, Hewlett Packard Enterprise Development LP, GIGA-BYTE Segments Co., Ltd., Fujitsu Limited, Inventec Corporation, PSSC Labs, Phoenixnap and Quanta Computer Inc. (Quanta Cloud Segments (QCT))

Global AI Server Market

Executive Summary

AI servers are specialized computing systems designed for handling artificial intelligence (AI) tasks, including machine learning model training, large dataset processing, and AI algorithm execution. They feature powerful hardware components like GPUs or TPUs to accelerate AI workloads. Equipped with advanced software frameworks, these servers facilitate the development and deployment of AI applications. With the increasing adoption of digital transformation, businesses require scalable and flexible computing resources, making AI servers crucial for meeting the computational demands of AI applications. The global AI server market was valued at US\$12.34 billion in 2023, and is expected to be worth US\$50.65 billion in 2029 and AI server shipments are anticipated to increase to 6.25 million by 2029.

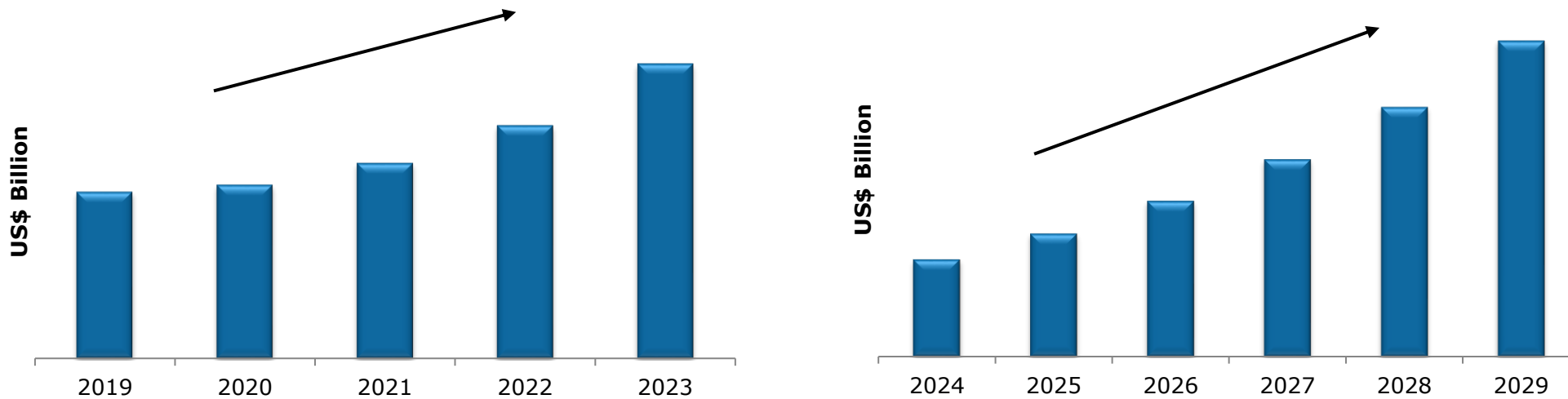
Global AI server market can be classified on the basis of type (training & inference), and by processing unit (GPU & non GPU). The training segment dominated the market in 2023, due to the increasing demand for sophisticated AI models across various industries, including healthcare, finance, autonomous vehicles, and natural language processing. However, it is expected that the market size of inference servers would surpass that of training servers for the first time in 2026 and the gap between these two kinds of servers will continue to widen. Based on region, North America dominated the AI server market in 2023.

The global AI server market has been significantly impacted by the COVID-19 pandemic, presenting both challenges and opportunities. Disruptions in supply chains and manufacturing processes have caused delays and shortages in hardware production, leading to increased prices and difficulties in meeting the rising demand for AI servers. However, the pandemic has also accelerated digital transformation across industries, fueling a surge in demand for AI solutions. Remote work, healthcare advancements, and the need for efficient data processing have highlighted the crucial role of AI servers. As businesses and governments seek to enhance technological capabilities in response to pandemic uncertainties, the AI server market has experienced sustained growth.

Global AI server market is expected to show a significant increase during the forecasted period, i.e. from 2024 to 2029. The growth can be attributed to increasing adoption of AI and machine learning (ML), favorable government regulations, advancements in GPU technology, increased research and development activities, integration of AI in autonomous systems and rise in big data analytics. However, some challenges are also impeding the growth of the market such as data privacy and security concerns and complexity of AI algorithms and skill shortages.

AI Server Market: Global Analysis

Global AI Server Market by Value

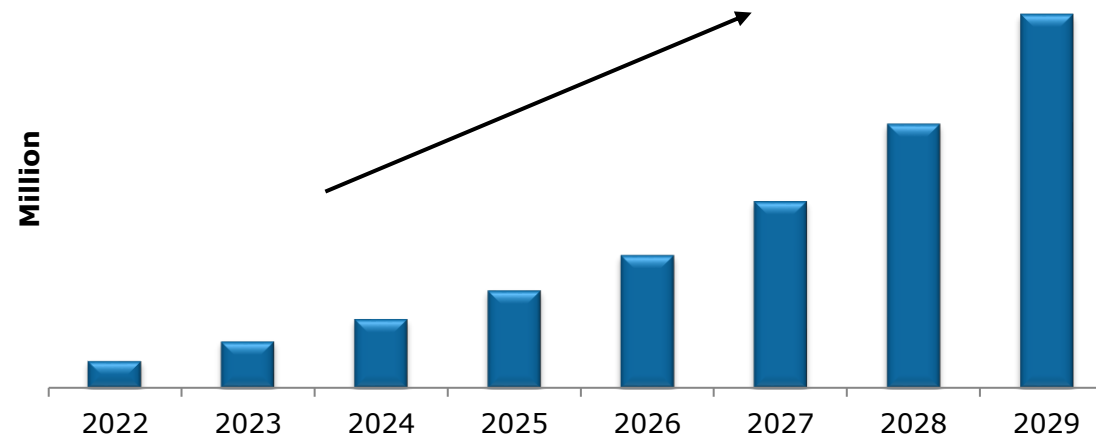


CAGRs	
2019-2024	xx%
2024-2029	xx%

Global AI server market was valued at US\$... billion in 2023 and is anticipated to reach up to US\$... billion by 2029 from US\$... billion in 2024, with a CAGR of xx%.

AI Server Market: Global Analysis

Global AI Server Market by Shipments

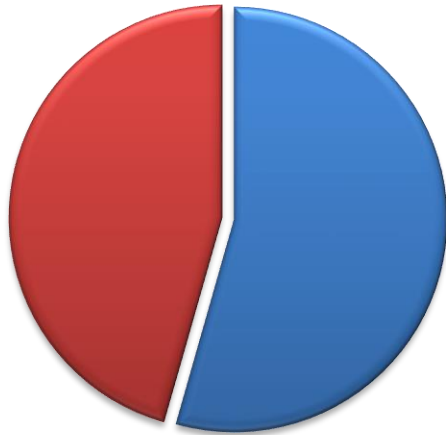


CAGR	
2024-2029	xx%

Global AI server market shipments is anticipated to reach up to ...million tons by 2029 from ...million tons in 2024, with a CAGR of xx%.

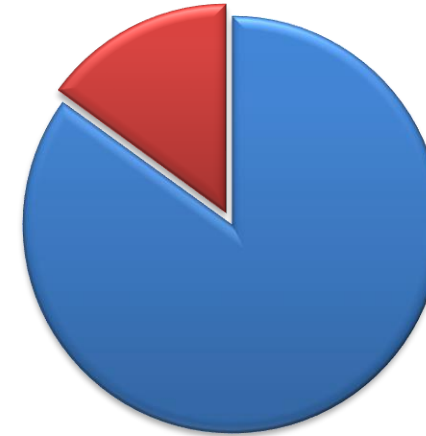
AI Server Market: Global Analysis

Global AI Server Market by Type; 2023



Type	Share
Training	xx%
Inference	xx%

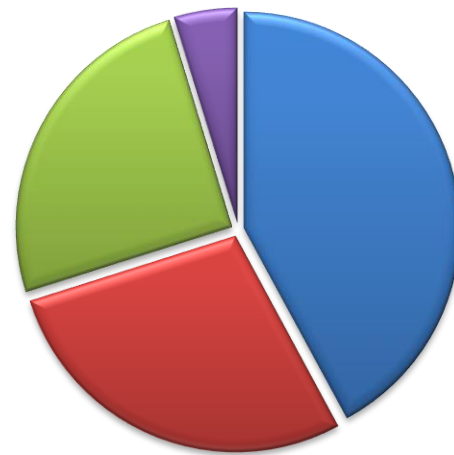
Global AI Server Market Shipments by Processing Unit ; 2023



Processing Unit	Share
GPU	xx%
Non GPU	xx%

AI Server Market: Global Analysis

Global AI Server Market by Region; 2023



North America, xx%

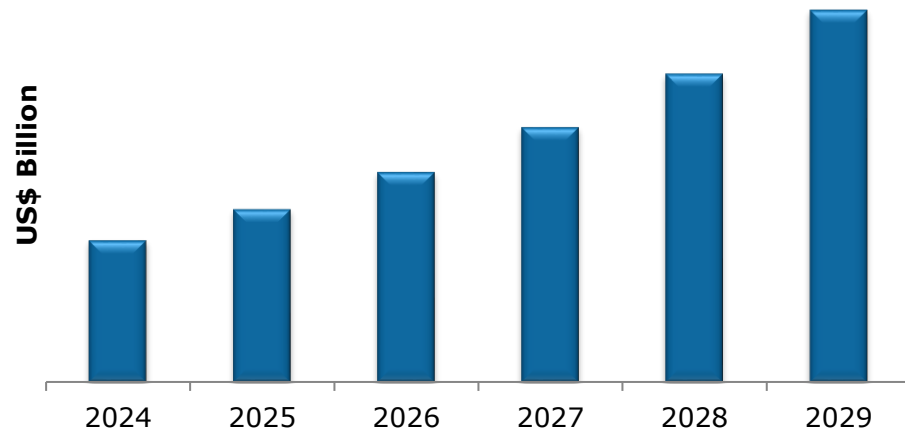
Europe, xx%

Asia Pacific, xx%

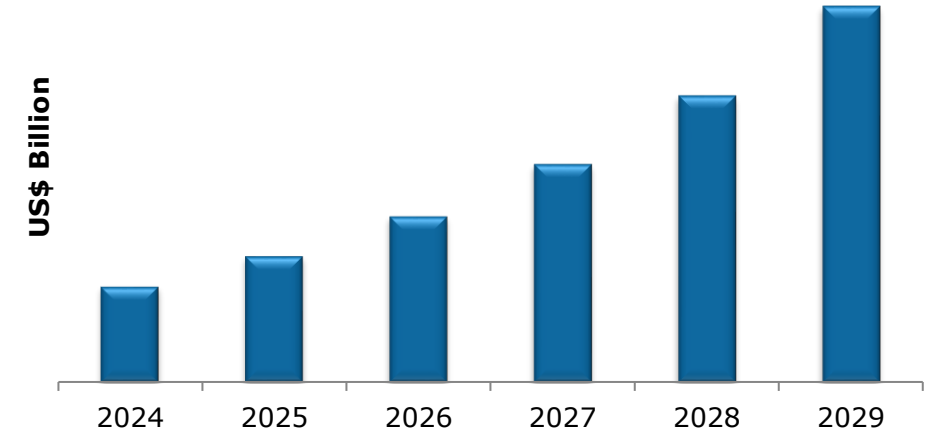
ROW, xx%

AI Server Market: Type Analysis

Global Training AI Server Market by Value



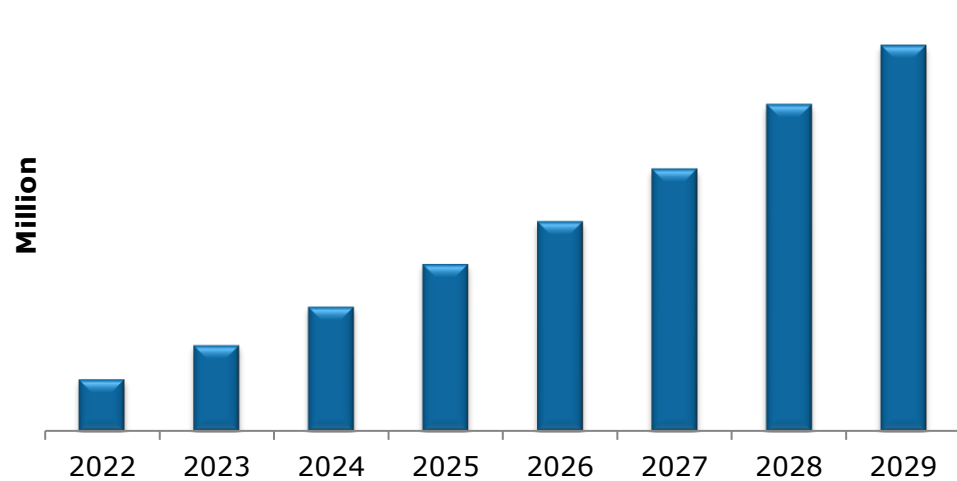
Global Inference AI Server Market by Value



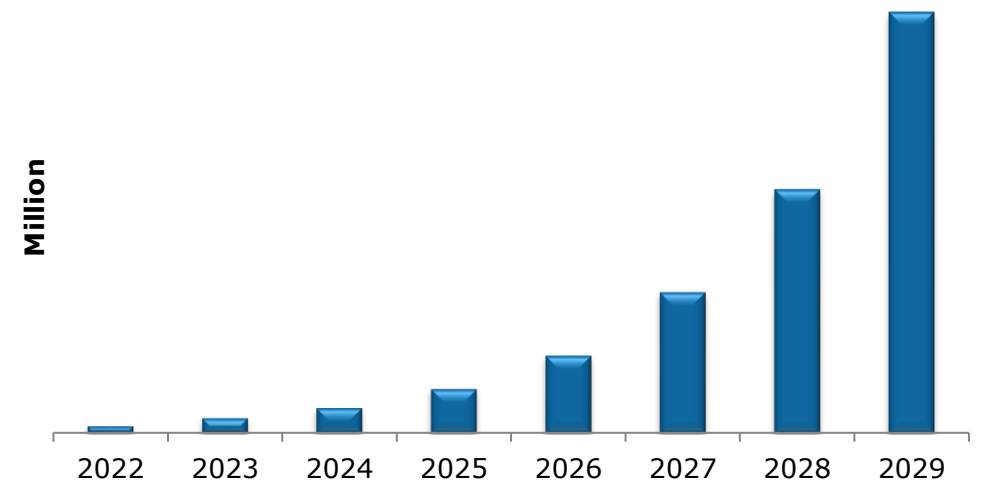
Type	CAGR (2024-2029)
Training	xx%
Inference	xx%

AI Server Market Shipments: Processing Unit Analysis

Global GPU AI Server Market by Shipments



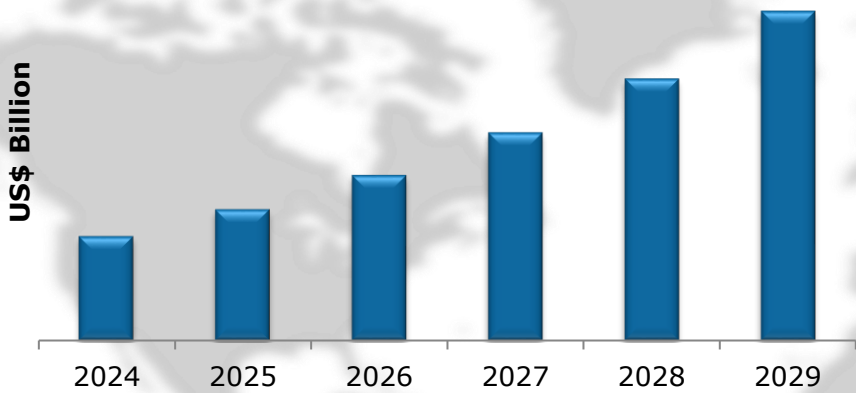
Global Non GPU AI Server Market by Shipments



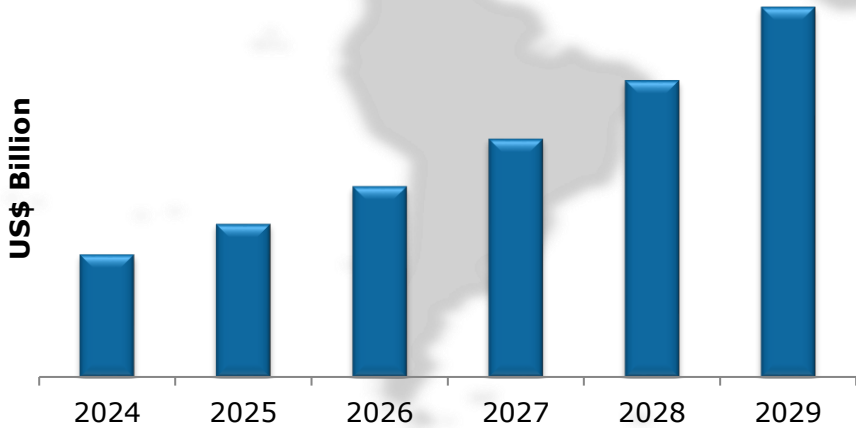
Processing Unit	CAGR (2024-2029)
GPU	xx%
Non GPU	xx%

AI Server Market: Regional Analysis

North America AI Server Market by Value



Europe AI Server Market by Value



Region	CAGR (2024-2029)
North America	xx%
Europe	xx%
Asia Pacific	xx%
ROW	xx%

North America AI Server Market: An Analysis

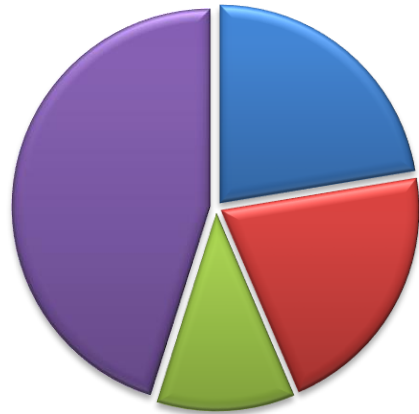
North America AI Server Market by Region; 2023



Region	Share (2023)	CAGR (2024-2029)
The US	xx%	xx%
Canada	xx%	xx%
Mexico	xx%	xx%

Europe AI Server Market: An Analysis

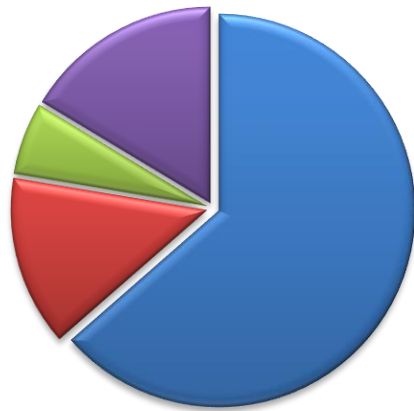
Europe AI Server Market by Region; 2023



Region	Share (2023)	CAGR (2024-2029)
Germany	xx%	xx%
UK	xx%	xx%
France	xx%	xx%
Rest of Europe	xx%	xx%

Asia Pacific AI Server Market: An Analysis

Asia Pacific AI Server Market by Region; 2023



Region	Share (2023)	CAGR (2024-2029)
China	xx%	xx%
Japan	xx%	xx%
India	xx%	xx%
Rest of Asia Pacific	xx%	xx%

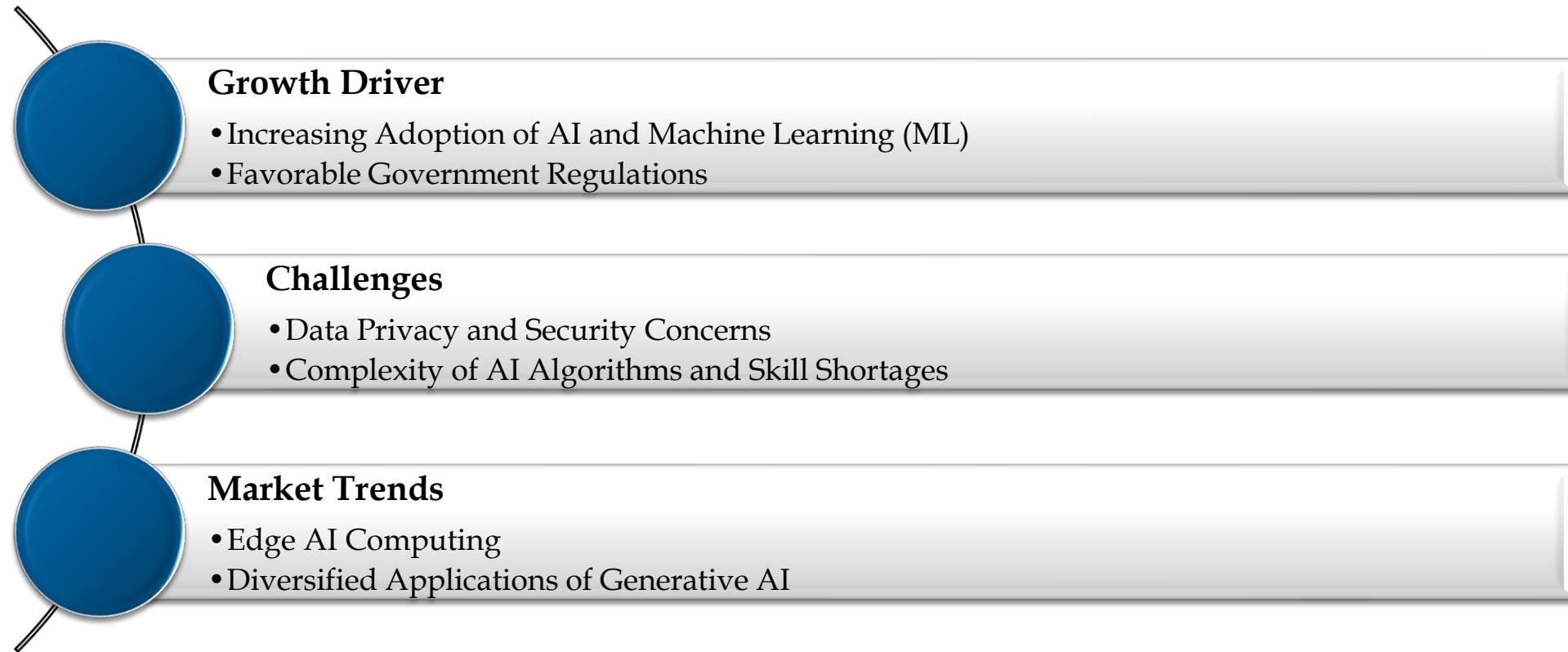
Asia Pacific AI Server Market: An Analysis

China AI Server Market by Chip Type; 2023



Chip Type	Share (2023)	CAGR (2024-2029)
GPU	xx%	xx%
NPU	xx%	xx%
ASIC	xx%	xx%
Others	xx%	xx%

Global AI Server Market: Dynamics



Global AI Server Market: Competitive Landscape

Players Profiled

- ❑ IBM Corporation
- ❑ Huawei
- ❑ NVIDIA Corporation
- ❑ ADLINK Technology
- ❑ Dell Technologies Inc.
- ❑ Lenovo Group Limited
- ❑ Hewlett Packard Enterprise
- ❑ GIGA-BYTE Technology Co., Ltd.
- ❑ Fujitsu Limited
- ❑ Inventec Corporation
- ❑ PSSC Labs
- ❑ Phoenixnap
- ❑ Quanta Computer Inc. (Quanta Cloud Technology (QCT))