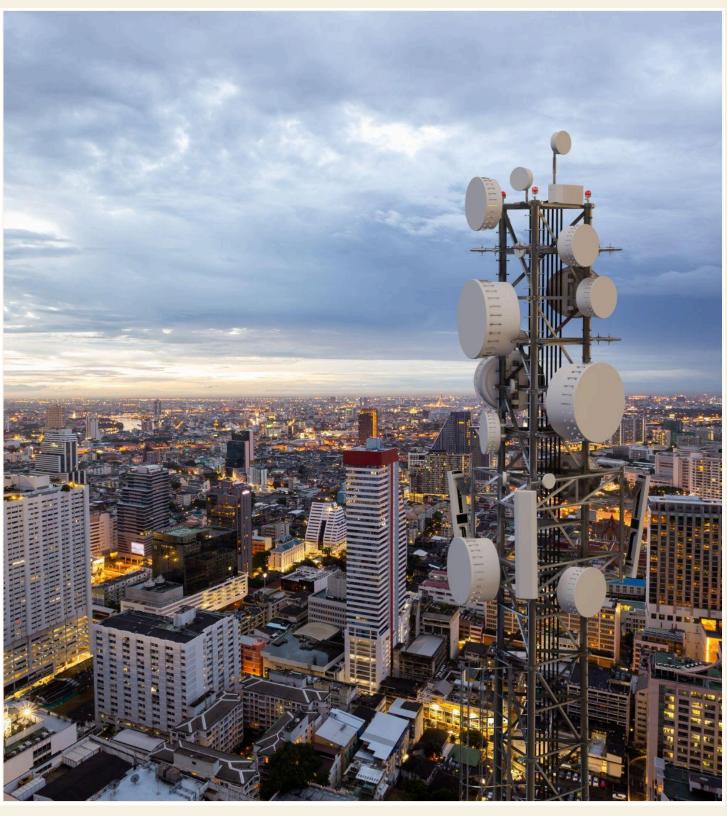
# Verizon Partner Solutions

# Powering the AI Ecosystem



# **Growth Trends and Market Potential**

The artificial intelligence (AI) market has experienced exponential growth in recent years and is poised to continue this trajectory. According to Grand View Research, the global artificial intelligence market size was valued at USD 279.22 billion in 2024 and is projected to grow at a CAGR of 35.9% from 2025 to 2030\*. This growth is driven by the increasing adoption of AI technologies across various industries, including healthcare, finance, automotive and retail.

Al's potential to revolutionize these sectors lies in its ability to analyze large datasets, automate complex processes, and deliver actionable insights. Innovations in machine learning, natural language processing, and computer vision have expanded Al applications, enabling businesses to enhance customer experiences, optimize operations, and create new revenue streams.

"Al infrastructure will need to be underpinned by secure network connectivity that will bridge the new distributed compute landscape. At Verizon, we see ourselves as not just participants in this Al-driven future, but as a key player enabling its success." Kyle Malady - Verizon Communications Inc - Executive Vice President and CEO - Verizon Business

## Verizon Al Connect

While training current advanced AI models requires immense computing resources, the shift towards real-time decision-making - known as inferencing - is poised to drive massive demand for additional computing power. According to McKinsey, 60-70% of AI workloads are expected to shift to real-time inference by 2030, creating an urgent need for low-latency connectivity, compute and security at the edge beyond current demand.

Verizon AI Connect is a strategy and integrated suite of products and solutions designed to manage AI resource-intensive workloads at scale. Verizon AI Connect is building on its strategy to power the AI ecosystem by reimagining existing assets integrated in Verizon's intelligent and programmable network. It brings together our Data Centre and telco facilities, and assets such as power, space and cooling plus our One Fiber infrastructure, our long-haul, metro and local fiber and optical networks and our Macro-5G Network leveraging network slicing and more.

Verizon is uniquely equipped to support the evolving demands of the AI industry due to its low latency, high bandwidth, and robust intelligent edge capabilities and by working closely with industry partners to reimagine how telco functions can adapt to increasing workloads and positioning itself as a leader in delivering the essential network infrastructure required for AI success.

The following explores how networking and infrastructure provide the backbone for a global AI Ecosystem

#### Infrastructure needs

High-speed, low - latency connections

Data-intensive processes managing the transport layer efficiently and quickly

Infrastructure must work seamlessly across different environments, geographies and support cutting edge technology

#### Scalability / flexibility

Businesses need networks that can adapt to increasing demands

Scalable to support the exponential growth in data forecast for Al Traffic

Flexibility to manage Al deployments and provide efficient processing and optimized data flow

#### Security & reliability

Data security and privacy are paramount concerns in the Al market

Network providers must ensure robust measures to protect sensitive information

Ensuring uninterrupted service and confidence in network performance

# Fostering strategic partnerships

Verizon recognizes the importance of collaboration in driving innovation in the AI sector

Through these collaborations, Verizon aims to create a comprehensive ecosystem that supports the diverse needs of the Al market

### Infrastructure Needs

As Al systems become more complex and data-intensive, particularly in scenarios such as autonomous vehicles, smart cities, and real-time analytics, the need for reliable, high-speed connectivity becomes crucial.

Verizon Partner Solutions boasts an extensive fiber-optic network serving over 80 major metro markets with dense deployments within the continental US. The Verizon fiber-optic network is designed to handle large volumes of data with minimal latency, and maximum security, making it ideal for AI workloads that require rapid processing and analysis. Verizon also has facilities that span continents, providing unparalleled connectivity solutions for businesses worldwide. This robust infrastructure serves as the backbone for high-speed data transmission, ensuring that AI applications can operate efficiently and reliably. The network's vast reach allows Verizon to offer comprehensive global coverage, while also providing dense metro assets supporting your end customers' diverse needs.

#### Fiber Optic Networks

Verizon's Dark Fiber for Infrastructure offering leverages its expansive metro fiber footprint in over 80 major markets. In fact, Verizon has laid over 57,000 miles of fiber since 2020. Secure, reliable, and scalable, this offering allows Data Center to Data Center connectivity for larger workloads, with flexible pricing and terms.

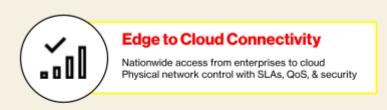
#### **Ethernet Networking**

Verizon's Ethernet service high bandwidth capabilities provide the necessary capacity to handle the large datasets often required for training AI models, while their low latency offers the data transmission rates essential for real time AI applications. Verizon's Ethernet services are available in point-to-point and point-to-multipoint configurations that can deliver the scalability required to support the growing number of devices typical of AI deployments.

### Wavelength Services

Verizon Wavelength Service provides low latency, ultra-high bandwidth for carrying heavy workloads that can be configured as point to point solution or in a Private Network arrangement. Verizon Wavelength service is uniquely positioned to offer secure data transport for Al computing, off-site storage, disaster recovery, data center connectivity and more. Verizon Wavelength Service offers layer 1 transport from 1G to 400G that can be provisioned Locally, Nationally, and Internationally.







#### Data Center Colocation

Hyperscalers and Al application companies require increased space, power, cooling, and connectivity from carriers due to several key factors, including \*Al and Machine Learning Workloads, Distributed Computing, Data Transfer and Storage and Real-Time Applications. Verizon Data Center Colocation Service provides a secure and dedicated environment where customers can host their internet servers, data networking, storage, security and voice equipment. Colocation customers have access to ultra-high-speed internet connectivity and the dedicated infrastructure necessary for their business to compete in today's marketplace with the flexibility to administer and access their own equipment. Verizon's global Data Center locations offer a full range of connectivity services, space, power, cooling, and physical security.

## Scalability and Flexibility for Al Workloads

Verizon's infrastructure supports network slicing and edge computing capabilities, allowing businesses to optimize data flow and processing. These technologies operate closer to the data source, reducing latency and enhancing performance.

#### **Network Slicing**

This technology allows businesses to create dedicated virtual networks optimized for specific AI applications, ensuring that resources are allocated efficiently, and performance is maximized.

#### **Edge Computing**

Verizon enables AI applications to process data closer to the source, reducing latency and improving response times. This is particularly beneficial for real-time AI applications, such as autonomous vehicles and smart city infrastructure.

#### SD-WAN

Verizon's SD-WAN solutions offer flexible, scalable, and secure connectivity for AI deployments, allowing businesses to optimize their network architecture and enhance operational efficiency.

### Security and Reliability

The importance of robust security and data privacy measures cannot be overstated. Verizon Partner Solutions prioritizes security by implementing advanced encryption, intrusion detection systems, and comprehensive cybersecurity protocols to safeguard data against potential threats and breaches all while ensuring compliance with data privacy regulations and industry standards in order to protect data integrity and confidentiality.

### Security Solutions

Verizon has over 25 years of industry experience, nine Security Operations Centers, six forensics labs and one of the largest IP networks in the world. We monitor 61 billion security events (on average) each year to improve our threat library and inform our teams. Our commercial network security solutions, including DDoS Shield for IDS and Verizon Business Internet Security, complement both our wireline and wireless connectivity services. Verizon also offers numerous Security Assessments and Professional Services. Additionally, Verizon publishes the annual Verizon Data Breach Investigations Report (DBIR). The DBIR is an industry benchmark for information on global cybersecurity data breaches and threat patterns. In the 2025 report, we analyzed more than 22,052 real-world security incidents and over 12,195 confirmed data breaches from our global data contributors, with victims in 139 countries.



### Fostering Strategic Partnerships

#### Importance of Strategic Alliances in the AI Ecosystem

Strategic partnerships and collaborations enable Verizon to enhance its capabilities, expand its reach, and deliver comprehensive solutions that address the diverse needs of the AI market. Verizon has a new strategic partnership with Vultr. A leading global

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### Verizon unveils Al strategy to power next-gen Al demands



#### Al Ecosystem Customer & Partner Quotes

Verizon provides a robust network infrastructure that can support demanding Al workloads," said Bikash Koley, VP, Google Global Networking and Infrastructure. "With Verizon's advanced network capabilities, we can accelerate the development and deployment of Al solutions. Verizon will benefit from these solutions by leveraging Google Cloud's Al and data platform to transform its customer, employee and network experience."

"As we continue to deliver critical infrastructure for our apps and technologies, we're strengthening our network with All and the future in mind. This means partnering with Vertzen to build and operate networks that support our existing services, while accelerating more intelligent and predictive capabilities that will serve the people that use our products," said Gaya Nagarajan, VP, Network Infrastructure at Meta.

"Telecom networks are uniquely positioned to provide a distributed Al infrastructure that meets enterprise needs," aid Ronnie Vasishta, Senior Vice President of Telecom, NVIDIA, "NVIDIA Al and accelerated computing, integrated with Verizon's network, allows enterprises to easily adopt Al-powered services at scale."

"GPUs play a crucial role in powering AI workloads, and rapidly growing demand for real-time inference is driving the need for AI infrastructure at the edge," said J.J. Kirchwell, CEO of Vultr. "With demand for data centers and GPU processing power outpacing supply, Vertizoris connectivity infrastructure is uniquely positioned to support our growth. Through Vertizon AI Connect, we can extend our global cloud footprint and bring outling-edge AI solutions to Vertizon Business' global customers."

For more information on Verizon Al Connect, visit <u>verizon.com/siconnect</u>

GPU As-a-service and cloud computing provider. Initially, Vultr will deploy their GPU as a service infrastructure in one of our data centers and tap into our high-capacity fiber network for distribution.

Verizon is also working closely with industry players like NVIDIA to reimagine how telco functions can work along with AI workloads. By leveraging external expertise and resources, facilitating knowledge through partnerships and pushing forward into the world of AI factories and distributed inference Verizon can offer more competitive services, driving growth and differentiation in a highly competitive landscape. Additionally, these partnerships facilitate knowledge sharing and the exchange of best practices, contributing to the continuous improvement and evolution of Verizon's AI offerings.

Strategic alliances are crucial for innovation in the evolving AI landscape. Collaborations with tech leaders, academic institutions, and industry organizations enhance Verizon's AI offerings. These partnerships provide access to cutting-edge technologies, research, and development, while ensuring solutions align with market needs. Joint ventures and innovation hubs further drive AI co-creation. Overall, strategic partnerships enhance Verizon's capabilities, expand its reach, and drive growth in the competitive AI market.

### Challenges and Opportunities

While the AI market presents numerous opportunities, it also faces several challenges. Data privacy and security remain paramount concerns, as AI systems often rely on sensitive information to function effectively. Additionally, the integration of AI technologies

into existing systems can be complex and costly, requiring careful planning and execution.

Verizon can leverage its expertise in secure, reliable network solutions to support Al deployments and help businesses overcome these challenges. Through strategic partnerships and technological advancements, Verizon can enable its clients to harness the full potential of Al, driving innovation and efficiency across various sectors.

### Responsible Al

Verizon, like many companies, uses AI to improve our products, services and business operations. We understand that poorly governed AI applications can result in unintended consequences, including potential bias or discrimination, whether in design, implementation or the data sets used to train AI models. Verizon has developed principles to guide its AI development, acquisition, deployment, and use overseen by a dedicated team with support from other internal subject matter experts, including our Privacy team and Business & Human Rights Program. This program is governed by a risk-based approach and informed by emerging global definitions, concerns, frameworks, regulations and legislation in AI and related fields.

https://www.verizon.com/about/investors/responsible-ai-program

#### **Future Directions and Innovations**

Verizon Partner Solutions is committed to exploring future directions and innovations that will shape the AI landscape and support the needs of the AI market. By investing in cutting-edge technologies such as edge computing, network automation, quantum computing, and AI-centric security solutions, Verizon is poised to deliver transformative solutions that drive the next wave of AI advancements. Through a culture of innovation and collaboration, Verizon aims to lead the way in enabling businesses to harness the full potential of AI and achieve new levels of success.

### Verizon Partner Solutions Powering the AI Ecosystem

Verizon Partner Solutions stands at the forefront of innovation, offering a robust value proposition tailored to the needs of the AI market. By leveraging its expansive and resilient network infrastructure, Verizon delivers unparalleled connectivity, security, and scalability, enabling businesses to harness the transformative power of AI. Verizon's strategic investments in edge computing, network automation, quantum computing, and AI-centric security solutions demonstrate its commitment to meeting the demands of a rapidly evolving digital landscape.

Through strategic partnerships and collaborations, Verizon enhances its ability to deliver cutting-edge solutions that drive efficiency, innovation, and growth across various industries. The company's focus on fostering a culture of innovation ensures that it remains agile and responsive to the dynamic needs of the AI market, positioning Verizon as a trusted partner in enabling businesses to unlock the full potential of AI.

We invite businesses and stakeholders in the AI ecosystem to explore the opportunities presented by partnering with Verizon Partner Solutions. By leveraging our advanced network capabilities and innovative solutions, you can accelerate your AI initiatives, achieve new levels of success, and stay ahead in a competitive market.

Connect with our team to learn more about how Verizon can support your Al journey and drive transformative outcomes for your business.

Let's collaborate to shape the future of AI and build a smarter, more connected world together.



# **Appendices**

The appendices provide additional context and details, while the references section offers sources for further reading and validation of the information presented in the white paper

#### References

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## Appendix 1. Infrastructure Needs: Data Centre Colocation.

Al and Machine Learning Workloads: GPUaaS providers are commonly used to accelerate Al and Machine Learning tasks, such as training and inferencing large models. Training involves iteratively processing massive datasets to optimize model parameters, while inferencing applies the trained model to new data to generate predictions or insights. Both processes necessitate transferring substantial amounts of data between storage, memory, and the GPUs themselves. The larger the models and datasets, the greater the bandwidth requirements.

**Distributed Computing:** To handle the scale and complexity of AI workloads, tasks are often distributed across multiple GPUs or even multiple servers. This distributed computing paradigm requires high-speed, low-latency connections to enable efficient communication and data sharing between the distributed components. Bottlenecks in network bandwidth can significantly impede performance and scalability.

**Data Transfer and Storage:** The data used for Al and other GPU-accelerated tasks often resides in the cloud or in remote data centers. Moving this data to and from the GPUaaS environment for processing requires substantial bandwidth. Additionally, storing and managing intermediate results and output data can also place significant demands on network resources.

**Real-Time Applications:** Many GPU-accelerated applications, such as real-time analytics, autonomous driving simulations, and interactive visualization, have stringent latency requirements. These applications demand high bandwidth to ensure that data can be processed and transmitted quickly enough to meet real-time constraints. Any delays caused by insufficient bandwidth can severely impact the user experience and the effectiveness of the application.

In essence, the bandwidth requirements of GPUaaS providers are directly proportional to the data intensity and performance demands of the workloads they support. GPUaaS providers that can offer robust and reliable network infrastructure will be well-positioned to meet the evolving needs of their customers and stay ahead in a competitive market.

For more information on Verizon Al Connect, visit verizon.com/aiconnect., or Or Contact your Verizon Partner Solutions Account Manager

