

Industrial Metaverse Market by Technology (Digital Twin, Augmented Reality, Virtual Reality, Artificial Intelligence, Edge Computing, Private 5G, Blockchain), End User (Automotive, Aerospace, Electronics, Healthcare) and Region - Global Forecast to 2029

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Abstracts

The global industrial metaverse market is estimated to grow from USD 28.7 billion in 2024 to USD 228.6 billion in 2029; it is expected to grow at a CAGR of 51.5% during the forecast period.

“Rising adoption of digital twin to drive the industrial metaverse market.”

The market has a promising growth potential due to several factors, including the rising adoption of digital twins, advancement in core technologies such as AR, VR, AI, and IoT, rising demand for efficiency and optimization in industrial sector, and addressing skill gaps and workforce challenges through industrial metaverse. It presents significant opportunities through continuous developments in 5G/6G, and integration of blockchain technology within industrial metaverse.

“AR and VR technology segment is expected to witness significant CAGR during the forecast period.”

In industrial manufacturing, AR overlays important data onto the real world and helps in workers training in industries, maintenance of production systems, and helps in remote collaboration for remotely located workers. VR creates immersive simulations for safe and realistic product design, prototyping, and virtual tours of complex facilities. This

helps in boosting efficiency and innovation within the industrial metaverse. AR technology is being used in workflow optimization, visualization, and 3D modelling. also, use of head mounted displays, gesture tracking devices, data gloves are helping demand of AR & VR devices across industries.

“Aerospace industry to witness significant CAGR for the end-user segment during the forecast period.”

Governments worldwide are launching new projects to transform aerospace infrastructure and security systems. They are using digital twins for collaborative and synchronized program management across the product lifecycle and value chain. In aerospace industry, VR plays an important role in training through advanced simulators. Flight simulators are important for preparing pilots to handle various in-flight scenarios. Furthermore, Private LTE and 5G networks are being deployed to support internal operations at major international and domestic airports such as Hong Kong, Shanghai Pudong.

“North America is likely to hold prominent market share in 2024.”

The industrial metaverse market in the North America is categorized further into US, Canada, and Mexico. The Americas dominates the industrial metaverse market due to its technological leadership, supportive government policies, diverse market opportunities, and active research and development. Also, presence of key technology providers such as PTC Inc. (US), Magic Leap, Inc. (US), Microsoft (US), and Alphabet Inc. (US) offer innovative AR solutions while companies such as Bentley Systems, Incorporated (US), IBM Corporation (US), Emerson Electric Co. (US), Microsoft (US). ANSYS, Inc. (US), Amazon Web Services, Inc. (US), offer digital twin solutions for industrial metaverse. These factors have propelled the region's strong market presence in industrial metaverse.

Breakdown of primaries

A variety of executives from key organizations operating in the industrial metaverse market were interviewed in-depth, including CEOs, marketing directors, and innovation and technology directors.

By Company Type: Tier 1 = 45%, Tier 2 = 35%, and Tier 3 = 20%

By Designation: C-level Executives = 40%, Directors = 45%, and Others (sales,

marketing, and product managers, as well as members of various organizations)
= 15%

By Region: North America =29%, Europe = 27%, Asia Pacific =36%, and Rest of the World = 8%

Key players profiled in this report

NVIDIA Corporation (US), Microsoft (US), Siemens (Germany), Amazon Web Services, Inc. (US), IBM (US), Meta (US), HTC Corporation (Taiwan), ABB (Switzerland), PTC (US), Dassault Systèmes (France), GE Vernova (US), Intel Corporation (US), AVEVA Group Limited (UK), Alphabet, Inc. (US), and Nokia (Finland) are the key players in the industrial metaverse market. These leading companies possess a wide portfolio of products and solutions, establishing a prominent presence in established as well as emerging markets. The study provides a detailed competitive analysis of these key players in the industrial metaverse market, presenting their company profiles, most recent developments, and key market strategies.

Research Coverage

This report offers detailed insights into the industrial metaverse market based on technology (Digital Twin, Artificial Intelligence, AR & VR, Edge Computing, Private 5G, and Blockchain), End User (Automotive, Aerospace, Electronics, Food & Beverages, Oil & Gas, Energy & Power, Healthcare and Others (Chemicals, and Paper & Pulp)), and region (North America, Europe, Asia Pacific, and Rest of the World (includes the Middle East, South America and Africa.))

The report also comprehensively reviews the industrial metaverse market drivers, restraints, opportunities, and challenges. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

Reasons to buy the report:

The report will help the leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall market and the sub-segments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report also helps stakeholders understand the industrial metaverse

market's pulse and provides information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

Analysis of key drivers (Rising adoption of digital twins, advancement in core technologies such as AR, VR, AI, and IoT, rising demand for efficiency and optimization in industrial sector, and addressing skill gaps and workforce challenges through industrial metaverse), restraints (high installation and maintenance costs of high-end metaverse components, and lack of standardization), opportunities (continuous developments in 5G/6G, and integration of blockchain technology within industrial metaverse) and challenges (Cybersecurity and privacy concerns, and Opposition from incumbents towards blockchain technology).

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product launches in the industrial metaverse market

Market Development: Comprehensive information about lucrative markets – the report analyses the industrial metaverse market across varied regions

Market Diversification: Exhaustive information about new products, untapped geographies, recent developments, and investments in the industrial metaverse market

Competitive Assessment: In-depth assessment of market shares, growth strategies, and product offerings of leading players like NVIDIA Corporation (US), Microsoft (US), Siemens (Germany), Amazon Web Services, Inc. (US), IBM (US), Meta (US), HTC Corporation (Taiwan), ABB (Switzerland), PTC (US), Dassault Systèmes (France), GE Vernova (US), Intel Corporation (US), AVEVA Group Limited (UK), Alphabet, Inc. (US), and Nokia (Finland). among others.

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