

Human Augmentation Market by Wearable (Wristwear, Bodywear, Footwear, Eyewear), AR (Head-mounted display), VR (Head-up display), Biometric (Fingerprint, Face, Iris), Exoskeleton (Powered, Passive), IVA (Chatbot), Functionality - Global Forecast to 2028

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Abstracts

The global human augmentation market is expected to be valued at USD 253.6 billion in 2023 and is projected to reach USD 545.1 billion by 2028; it is expected to grow at a CAGR of 16.5% from 2023 to 2028. Wearable devices, such as fitness trackers and smartwatches, are widely adopted for monitoring various health and wellness metrics. The widespread adoption of wearable devices in the consumer market indicates a growing interest in incorporating technology into daily life. This increased acceptance has spilled over into the broader human augmentation market, raising awareness and driving further innovation.

“Aerospace and Defense end-user industries to account for the second highest CAGR for human augmentation market.”

The military and defense sector is investing heavily in human augmentation technologies to enhance the physical and cognitive capabilities of soldiers. Exoskeletons, wearable devices, and cognitive enhancements can improve soldiers' strength, endurance, and decision-making, increasing their overall performance and effectiveness. AR and VR technologies are used for training, simulation, and mission planning. These technologies provide immersive experiences for soldiers and defense personnel, enhancing their skills and preparedness. Advances in technology have led to the development of lightweight, portable, and durable human augmentation devices that are suitable for use in the challenging and rugged environments encountered in the aerospace and defense sectors.

“North America to have the highest share of the human augmentation market”

North America, particularly the United States, is a hub for technological innovation. Ongoing advancements in fields like robotics, artificial intelligence, biotechnology, and materials science are driving the development of advanced human augmentation technologies. The demand for medical augmentations, such as prosthetics, wearable medical devices, and surgical robotics, is increasing due to a growing aging population and the need for advanced healthcare solutions. The consumer market for human augmentation includes products like fitness wearables, smart glasses, and brain-computer interfaces. These consumer-oriented technologies are contributing to the market's growth.

The study contains insights from various industry experts, ranging from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

By Company Type: Tier 1 – 10%, Tier 2 – 55%, and Tier 3 – 35%

By Designation: C-level Executives – 45%, Directors – 25%, and Others – 30%

By Region: North America – 55%, Europe – 20%, Asia Pacific – 15%, RoW – 10%

The key players operating in the human augmentation market are Samsung (South Korea), Alphabet Incorporation (US), Apple Inc. (US), Meta (US), Microsoft (US).

The research report categorizes the Human Augmentation market, By Product Type (Wearable Devices, AR Devices, VR Devices, Exoskeletons, Biometric systems, Intelligent Virtual Assistants), Functionality (Body-worn, Non Body-worn), Technology (Artificial Intelligence Integration, Quantum Computing Augmentation, Biohacking and Bio-Augmentation), End-user (Consumer, Commercial, Medical, Aerospace & Defense, Industrial, Other end-user), and Region (North America, Europe, Asia Pacific, and RoW). The scope of the report covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the human augmentation market. A detailed analysis of the key industry players has been done to provide insights into their business overviews, products, key strategies; Contracts, partnerships, agreements. new product & service launches, mergers and acquisitions, and recent developments associated with the human augmentation

market. Competitive analysis of upcoming startups in the human augmentation market ecosystem is covered in this report.

Research Coverage:

Key Benefits of Buying the Report

Analysis of key drivers (Growth in virtual reality (VR) and augmented reality (AR) technologies, Advancements in medical technology, Increasing adoption of wearable devices, Growing adoption of advanced technologies in sports), restraints (High cost of technology, Integration issues with existing systems), opportunities (Growing adoption of technologies in military and defense, Adoption of remote work and telemedicine, Wide range of applications in gaming and entertainment industries), and challenges (Long-term health effects, Safety and liability issues) influencing the growth of the human augmentation market.

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

Market Development: Comprehensive information about lucrative markets – the report analyses the human augmentation market across varied regions.

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

Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players like Samsung (South Korea), Alphabet Incorporation (US), Apple Inc. (US), Meta (US), Microsoft (US) among others in the human augmentation market.

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*Details on Business Overview, Products/Services/Solutions Offered, Recent Developments, and MnM View (Key strengths/Right to Win, Strategic Choices Made, and Weaknesses and Competitive Threats) might not be captured in case of unlisted companies.

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