

North America Healthcare 3D Printing - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029

Market Report | 2024-02-17 | 85 pages | Mordor Intelligence

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Report description:

The North America Healthcare 3D Printing Market is expected to register a CAGR of 9.10% during the forecast period(2024-2029).

Amid the COVID-19 pandemic, 3D printing emerged as a crucial technology to enable better healthcare and overall response to emergencies. Due to the restriction and alterations in the supply chain of products, the market had a slight adverse impact during the pandemic.

Key Highlights

-However, the widespread usage of 3D printing in the COVID-19 pandemic for 3D-printed devices, such as face shields, masks, valves, and nasopharyngeal swabs has fuelled the growth. For instance, as per the report published by the United States FDA in December 2022, to address the lack of personal protective equipment, the FDA is collaborating with the NIH, VA, and America Makes to support non-traditional manufacturing techniques like 3D printing. Through this collaboration, the VA evaluates 3D-printable designs for COVID response on a clinical level, and the NIH then puts those designs on the 3D Print Exchange. Thus, the continuing demand for 3D printing during the COVID-19 pandemic is expected to have significant growth in the market over the coming years.

-The factors driving the market's growth are increasing demand for customized additive manufacturing, increasing medical applications, and new patent expiration in the region. Assisting surgeons in planning for difficult procedures, improving outcomes, and lowering costs, 3D printers can create very accurate and comprehensive anatomical models. For instance, in 2022, scientists from Florida Atlantic University and the University of Virginia created a robotic model of the human spine to assist surgeons in anticipating the outcomes of interventions before surgery. Thus, the increasing demand for 3D printing for healthcare physicians is expected to boost the market over the forecast period.

-Furthermore, the patent expiration will lead to the end of monopolistic control of some companies over the market, making

additive manufacturing products more competitive in the market, which will improve the quality of the product. These factors have helped the market grow in the North American region.

-However, the cost of additive manufacturing is still high, which leads to affordability issues, especially in developing and underdeveloped countries. Also, there is a lack of skilled professionals to operate these machines. Hence, these factors are expected to hinder the growth of the market in the region.

North America Healthcare 3D Printing Market Trends

Polymers are Expected to Register a High Growth in the Market Over the Forecast Period

- Due to their extensive potential for several applications in the healthcare industry, polymers and their composites are among the most frequently utilized materials in additive manufacturing. For many years, polymer-based additive manufacturing has been utilized to make components for prosthetic limbs and medical equipment.

- Plasters made particularly for each patient using these polymers not only hold the structure to enable healing but are also comfortable because they can be tailored to each patient's needs. This is accomplished with the aid of a machine that blends additive manufacturing with 3D scanning techniques, allowing for the quick scanning of a patient's limb and printing of personalized plasters.

- Furthermore, the new partnerships and acquisitions among the market players are expected to increase the widespread applications of polymers in healthcare 3D printing. For instance, in August 2022, Covestro signed a definitive agreement to sell its Additive Manufacturing Business to Stratasys. The business provides material solutions for common polymer 3D printing processes. Covestro's divested business includes employees, research and development facilities, production assets, and offices in the United States.

- Similarly, in February 2022, 3D Systems agreed to acquire Kumovis, an additive manufacturing solutions provider for personalized healthcare applications. Kumovis' solutions are built upon their extrusion technology specifically developed for precision printing of medical-grade, high-performance polymers such as PEEK (polyether ether ketone). With this acquisition, 3D Systems added an extrusion technology to its extensive polymer printing healthcare portfolio, allowing the company to expand its addressable market for personalized healthcare applications and is expected to have a significant impact on the market over the forecast period.

United States is Expected to Have a Significant Growth in the Market Over the Forecast Period

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North America Healthcare 3D Printing Industry Overview

The North American healthcare 3D printing market is fragmented, with several market players. The United States and Canada have developed well-structured healthcare systems. These systems also encourage research and development. These policies encourage market players to enter the United States and Canada. Key players are developing and launching novel products and technologies to compete with existing products, while others are acquiring and partnering with other companies trending in the market. Some of the major market players include 3D Systems Inc., EnvisionTEC, GE Healthcare, Stratasys Ltd., and others.

Additional Benefits:

- The market estimate (ME) sheet in Excel format

- 3 months of analyst support

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