

4D Printing in Healthcare Market by Component (Equipment, 3D printer SMM, Hydrogels, Software, Service, Cells), Technology (FDM, SLS, Stereolithography), Application (Research Model, Implant), End user (Hospital, Dental Lab, ASC) - Global Forecast to 2026

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Abstracts

“Technological advancements in 3D printing technology, such as the development of smart programmable materials are expected to drive the overall growth of the global 4D printing in healthcare market.”

The 4D printing in healthcare market is estimated to reach USD 32 million by 2026 from USD 9 million in 2021, at a CAGR of 29.9% during the forecast period. Growth in this market is driven mainly by technological advancements in 3D printing technology, such as the development of smart, programmable materials. On the other hand, high development & production costs, need for compliance with regulatory & performance standards that will slow product launches, and potential safety hazards are expected to restrain the growth of this market to a certain extent

“The PolyJet segment is expected to grow at the highest CAGR during the forecast period.”

Based on technology, the FDM segment is expected to account for the largest share of the 4D printing in healthcare market in 2021. However, the PolyJet segment is expected to register the highest growth during the forecast period. This technology enables the development of complex shapes with intricate details and delicate features. It offers products with a variety of colors and materials into a single model. The reduced material

wastage due to the higher accuracy of deposition and the ability to use multiple materials and colors are the major advantages of this process.

“The medical & research models segment is expected to account for the largest share of the 4D printing in healthcare market in 2021.”

Based on application, the 4D printing in healthcare market is segmented into medical and research models, surgical guides, and patient-specific implants. In 2021, medical & research models segment is expected to account for the largest share of the 4D printing in healthcare market. These models can be customized as per the patient’s pathology, which will further help in delivering efficient patient care. The ability of the 4D printing technology in manufacturing smart medical models will bring significant transformation in the medical field and will support the growth of this segment in the forecast period.

“North America to witness high growth during the forecast period.”

By region, the global 4D printing in healthcare market is segmented into North America, Europe, Asia, and the Rest of the World (RoW). North America is estimated to be the largest regional market for 4D printing in healthcare. This can be attributed majorly to the continuous technological advancements, growing demand for organ transplantation, efforts taken in the research & development of the 4D printing technology in the healthcare sector, and the presence of highly developed healthcare infrastructure in the region.

The primary interviews conducted for this report can be categorized as follows:

By Company Type: Tier 1 (28%), Tier 2 (42%), and Tier 3 (30%)

By Designation: C-level (30%), D-level (34%), and Others (36%)

By Region: North America (56%), Europe (24%), Asia (12%), and RoW (8%)

List of Companies Profiled in the Report

3D Systems (US)

Organovo Holdings Inc. (US)

Stratasys Ltd. (US and Israel)

Dassault Systèmes (France)

Materialise (Belgium)

EOS GmbH Electro Optical Systems (Germany)

EnvisionTEC (Germany)

Poietis (France)

Research Coverage:

This report provides a picture of the global 4D printing in healthcare market. It aims at estimating the size and future growth potential of the market across different segments, such as component, technology, application, end user, and region. The report also includes an in-depth competitive analysis of the key market players, along with their company profiles, recent developments, and key market strategies.

Key Benefits of Buying the Report:

The report will help market leaders/new entrants by providing them with the closest approximations of the revenue numbers for the overall 4D printing in healthcare market and its subsegments. This report will also help stakeholders better understand the competitive landscape and gain more insights to position their business better and make suitable go-to-market strategies. It will also enable stakeholders to understand the pulse of the market and provide them with information on the key market drivers, restraints/challenges, and opportunities.

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