

# 4D Printing Market - Forecasts from 2017 to 2022

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## Abstracts

4D Printing market is projected to witness a CAGR of 40.30% to be of worth US\$152.782 million by 2022, from US\$28.103 million in 2017. 4D printing is an advanced process for printing customizable smart materials wherein an object is 3D printed using a programmable material. It enables the object to change its shape over time by using UV light, change in temperature, and other internal or external stimuli. The technology leads to reduced resource consumption and lesser energy wastage. Growing demand for technological innovation across various end-use industries is further contributing to the market growth. However, factors such as high development cost, potential safety hazards, and rising issues regarding intellectual property rights will hinder the growth of global 4D printing market during the forecast period.

### By Material

By material, global 4D printing market is segmented as programmable textile, programmable carbon fiber, and programmable wood-custom printed wood grain. Programmable carbon fiber will witness the fastest market growth between 2017 and 2022 as it is light and strong, reduces the total weight of the product and requires no complex electronics, sensors, or actuators.

### By Geography

Geographically, North America is projected to be the dominant region till the end of the forecast period due to initialization of 4D printing technology coupled with high investments in R&D in the region. APAC region will also witness a considerable regional market growth due to technological developments taking place in the region.

### Competitive Insights

Prominent key market players in 4D printing market include Autodesk, 3D Systems, Stratasys, ExOne, and Hewlett-Packard among others. The global 4D Printing market is highly concentrated with few vendors in the Global 4D Printing market. 4D printing is still an emerging technology and vendors are trying to tap potential opportunities via new product launch and M&A to expand their global footprints. In October 2016, Dassault Systemes acquired Computer Simulation Technology AG, the German technology leader in electromagnetic (EM) and electronics simulation to integrate CST solutions into its portfolio to offer a new standard in multiphysics and multiscale simulation.

## Segmentation

In this report, 4D Printing market is segmented by material, industry, and geography as below:

### By Material

- Programmable Textile
- Programmable Carbon Fiber
- Programmable Wood-Custom Printed Wood Grain

### By Industry

- Automotive
- Aerospace and Defense
- Infrastructure
- Textile
- Healthcare
- Energy and Power
- Others

### By Geography

- Americas
  - North America
  - South America
- Europe Middle East and Africa
  - Europe
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Asia Pacific

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