

## 3D Printing Industry, Unraveling Market Dynamics, Investment Opportunities, and Competitive Strategies (2023-2030)

CALIFORNIA, UNITED STATES, December 1, 2023 /EINPresswire.com/ -- Market Overview:

3D printing, also known as additive manufacturing, refers to processes used to create three-dimensional objects in which layers of material are formed under computer control to create an object. 3D printing is gaining acceptance in industrial, medical and consumer applications.

## Market Dynamics:

The <u>3D printing market</u> is expected to witness significant growth during the forecast period owing to increasing demand from automotive industry for manufacturing of prototype components and spare parts. Additionally, growing adoption of 3D printing in healthcare industry for manufacturing implants, scaffolds, prosthetics and other medical devices will further aid the market growth during 2023-2030. 3D printers provide manufacturing flexibility to custom design features easily as per clients demand compared to traditional methods. This advantage is supporting increased adoption of 3D printing across aerospace and defense industries for manufacturing tools and models. However, high costs of 3D printing material may limit market growth during the forecast period.

According to Coherent Market Insights study, The global 3D printing market was valued at US\$ 7,240.0 Mn in 2019 and is forecast to reach a value of US\$ 15320.8 Mn by 2027 at a CAGR of 9.8% between 2020 and 2027.

Get Sample Copy of the Report @ <a href="https://www.coherentmarketinsights.com/insight/request-sample/3940">https://www.coherentmarketinsights.com/insight/request-sample/3940</a>

3D Printing Market Drivers:

Increasing Application in Various Industries Increasing Use in Healthcare Industry

3D printing is gaining widespread popularity across various industries like automotive, aerospace, defense, consumer goods, education, architecture due to its ability to produce customized complex parts and components. 3D printing allows manufacturers to produce customized products on-demand instead of bulk production which helps reduce inventory costs

and wastage. It offers significant design flexibility and complex geometries can be easily produced. Various industries are using 3D printing technology to produce prototypes and final products. This wide scope of application across industries is a major driver fueling the growth of 3D printing market.

3D printing technology is revolutionizing the healthcare industry. It is used to produce medical implants, prostheses, surgical instruments, drug testing models and patient-specific medical devices. 3D printed implants and medical devices offer superior custom fit and design compared to traditional ones-size-fits-all approaches. It helps produce implants of precise size, shape and design as per patient's anatomy. 3D bioprinting technology is allowing production of tissues and organs for transplant. Growing application of 3D printing in healthcare for cost-effective personalized medical solutions is boosting the demand.

Market Restrain: High Material and Equipment Cost

The high initial cost of 3D printers and materials is a major challenge limiting the large-scale adoption of 3D printing technology. Commercial grade 3D printers range from tens of thousands to several hundred thousand US dollars making it unsuitable for small scale businesses and individual users. Even the consumables like raw materials, filaments, resins used in 3D printing are expensive. Plastics like ABS and PLA that are commonly used cost between \$30 to \$100 per kilogram. Metallic powders used in powder bed fusion processes can cost thousands of dollars per kilogram. The operating and maintenance costs further add to the total cost of ownership. High material and equipment costs make 3D printed parts and products more expensive than traditional manufacturing methods in low volume production. This price barrier is a major restrain for 3D printing market.

Market Opportunity: Growing Adoption in Educational Institutes

The adoption of 3D printing technology provides huge opportunities in the education sector. 3D printers allows students to visualize and understand complex structures and mechanisms in a more tangible way compared to conventional textbooks. Many educational institutes across the world are incorporating 3D printing in their curriculum to enhance learning experience. It helps students gain hands-on experience of product design, engineering, architecture and other technical subjects. 3D printed models and parts can be shared among students for collaborative learning projects. Growing popularity of STEAM (Science, Technology, Engineering, Arts and Mathematics) education is driving the demand for affordable desktop 3D printers in schools and colleges. Educational applications offer significant growth potential for low-cost 3D printing market.

Request for Customization @ <a href="https://www.coherentmarketinsights.com/insight/request-customization/3940">https://www.coherentmarketinsights.com/insight/request-customization/3940</a>

Market Trends: Rising Adoption of Polyjet Multi-material 3D Printing

Polyjet multi-material 3D printing technology capable of printing with multiple materials within the same print is gaining popularity. It allows printing of parts with varying properties like flexibility, texture, transparency and color within the same component. Polyjet printers extrude photopolymers through an array of inkjet printhead allowing production of parts with different materials or properties at micro-level resolution. Industries are increasingly adopting polyjet 3D printing for accurate color parts, durable prototypes with stiff and flexible regions and multi-material engineering parts. The technology enables manufacturing of complex designs with multiple materials that cannot be produced through conventional single material 3D printing or other technologies. Increasing R&D towards design and development of new advanced photopolymers is a key trend driving the polyjet 3D printing market.

The major players operating in the market include: ☐ 3D Systems Inc. ☐ Voxeljet Technology GmbH ☐ Arcam AB ☐ Stratasys Ltd. ☐ Concept Laser GmbH ☐ Solidscape Inc. ☐ EOS GmbH Electro Optical Systems □ SLM Solutions GmbH ☐ ExOne GmbH Optomec. These companies are focusing on new product development, partnerships, collaborations, and mergers and acquisitions to increase their market share and maintain their position in the market. Segmentation: ☐ By Use: Commercial, Personal. ☐ By Technology: Polyjet, FDM, SLS, SLA, Others. ☐ By Application: Consumer electronics, Automotive, Medical, Industrial or business machines, Aerospace, Military and defense, Architectural, Education, Others.

Market segment by Region/Country including:

- North America (United States, Canada and Mexico)
- Europe (Germany, UK, France, Italy, Russia and Spain etc.)
- Asia-Pacific (China, Japan, Korea, India, Australia and Southeast Asia etc.)

- South America (Brazil, Argentina and Colombia etc.)
- Middle East & Africa (South Africa, UAE and Saudi Arabia etc.)

Buy Now @ https://www.coherentmarketinsights.com/insight/buy-now/3940

Frequently Asked Questions (FAQs):

☐ What are the key factors hampering growth of the 3D Printing market?
☐ What are the major factors driving the global 3D Printing market growth?
☐ Which is the leading component segment in the 3D Printing market?
☐ Which are the major players operating in the 3D Printing market?
☐ Which region will lead the 3D Printing market?
☐ What will be the CAGR of 3D Printing market?
☐ What are the drivers of the 3D Printing market?

Mr. Shah Coherent Market Insights +1 2067016702 email us here Visit us on social media: Facebook Twitter

LinkedIn

This press release can be viewed online at: https://www.einpresswire.com/article/672247386

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2023 Newsmatics Inc. All Right Reserved.