

3D Printing Medical Device Software Market to Surpass USD 0.207 Billion by 2031 Fueled by Personalized Medicine Demand

3D Printing Medical Device Software Market Size and Share Analysis, Application, Industry Overview, Report 2024-2031

AUSTIN, TEXAS, UNITED STATES, June 3, 2024 /EINPresswire.com/ -- The <u>3D</u> <u>Printing Medical Device Software</u> <u>Market Size</u>, valued at USD 0.063 Billion in 2023, is anticipated to reach USD 0.207 Billion by 2031. This translates to a compound annual growth rate (CAGR) of 16% throughout the forecast period.



The 3D printing medical device software market is poised for significant growth, fueled by the increasing demand for personalized medical devices and the continuous advancements in 3D printing technology. This technology offers a unique solution for creating customized implants and prosthetics, leading to improved patient outcomes and a more efficient healthcare system.

List of 3D Printing Medical Device Software Market Companies Profiled in Report:

- 3D Systems Corporation
- 3D Totem
- AckurettaTechnologies
- Carima
- DWS Systems
- Materialise NV
- Nemotec
- PS-Medtech
- Real Dimension Inc
- Regenhu
- Stratasys Ltd

Download Free Sample Report of 3D Printing Medical Device Software Market @ <u>https://www.snsinsider.com/sample-request/2599</u>

The critical shortage of donor organs is a major concern in the healthcare sector. As per the Organ Procurement and Transplantation Network (OPTN), over 120,000 people in the United States alone were waiting for an organ transplant by the end of 2018. 3D bioprinting offers a promising solution to bridge this gap. This technology utilizes bioink, a combination of living cells and biomaterials, to create functional human tissues and organs based on digital instructions. Additionally, 3D printing facilitates cost-effective personalized treatments. For instance, 3D-printed skin grafts can significantly reduce the need for surgery and accelerate healing for burn victims. These advancements are expected to propel the growth of the 3D Printing Medical Device Software Market.

In February 2023, Stratasys Ltd. launched TrueDent resin, a novel material specifically designed for dental applications, offering a wider range of shades for creating realistic dental structures.

Unveiling the 3D Printing Medical Device Software Landscape

The 3D printing medical device software market is experiencing a surge in competition as new players bring fresh solutions to the table. This customer-centric industry prioritizes seamless integration throughout the supply chain, from meticulous planning to post-sales support.

Planning with a Purpose

The journey begins with careful planning, ensuring the software is built with the right features and functionalities to meet specific needs. Leading vendors leverage open-source software as a foundation, subjecting it to rigorous quality and security checks before integration. Customer satisfaction remains paramount, with a focus on exceeding expectations throughout the development, distribution, and sales process. Finally, post-sales monitoring tracks market trends and software effectiveness, ensuring continuous improvement.

Catering to Diverse Needs

The evolution of 3D printing technology addresses the varied requirements of healthcare facilities. Industrial-grade high-throughput printers cater to large-scale production needs in hospitals, offering high capacity and consistent quality. Conversely, desktop printers provide excellent print quality in a compact and versatile package, ideal for dental clinics. The affordability and adaptability of these printers across different practices are significant growth drivers.

The Rise of CAD/CAM

The integration of computer-aided design (CAD) and computer-aided manufacturing (CAM) is revolutionizing the medical and dental industry. This technology offers exceptional precision in surgical planning and dental restoration. CAD/CAM facilitates the design and manufacturing of customized dental prosthetics (like zirconium crowns) and orthopedic implants, leading to improved patient outcomes. Additionally, it reduces the need for temporary solutions and

revision surgeries, ultimately lowering treatment costs. The growing adoption of CAD/CAM is evident, with a 2022 survey by the American Academy of Cosmetic Dentistry revealing that 30% of US dental practices already utilize chairside CAD/CAM, with an additional 32% considering future investment.

Key Market Segments

Ву Туре

- Integrated
- Standalone

By Function

- Printing
- Analysis
- Planning
- Design
- Visualization
- Navigation

By Application

- Medical imaging
- Dental
- Surgery
- Research
- Physical Therapy
- Aesthetic Medicine

By End User

- Medical
- Device Companies
- Dental Laboratories
- Hospitals and Clinics
- Research Institutes

Have Any Query? Ask Our Experts @ https://www.snsinsider.com/enquiry/2599

Market Diverse Segmentation

The 3D Printing Medical Device Software Market caters to various stakeholders within the healthcare ecosystem. Integrated software solutions streamline workflows and facilitate medical device customization. The printing function allows for the creation of physical models for patient education and surgical planning. The medical imaging segment leverages 3D printing technology to create precise medical models from imaging data. Medical device companies are at the forefront of developing and utilizing 3D printing software for the production of innovative

medical devices.

Impact of Russia-Ukraine War on the 3D Printing Medical Device Software Market The ongoing conflict between Russia and Ukraine has disrupted the global supply chain, impacting various industries, including 3D printing. The limited availability of raw materials like titanium and cobalt chrome, crucial for 3D-printed medical implants, poses a significant challenge. Additionally, sanctions imposed on Russia have restricted access to its technological advancements in 3D printing metal technologies. Furthermore, the war has diverted resources away from healthcare spending, potentially hindering investments in 3D printing medical device software in the short term. However, the long-term impact remains to be seen. The potential for 3D printing to improve surgical outcomes and offer cost-effective solutions could lead to increased adoption in post-conflict healthcare reconstruction efforts.

Impact of Economic Slowdown on the 3D Printing Medical Device Software Market Hospitals and clinics might prioritize essential medical equipment over investing in advanced technologies like 3D printing. However, the long-term outlook remains positive. The costeffectiveness and efficiency benefits associated with 3D printing could incentivize healthcare institutions to adopt this technology in the long run. Additionally, the rising demand for personalized medicine is expected to continue driving the market forward even during economic downturns.

North America Retains Top Spot in 3D Printing Medical Device Software Market North America remains the undisputed champion of the 3D printing medical device software market, capturing a commanding 45.80% share in 2023. This dominance stems from two key factors: the region's enthusiastic embrace of cutting-edge technologies and the presence of established industry leaders. The U.S. stands out as the North American market leader, while Canada demonstrates the most impressive growth trajectory.

Asia Pacific Poised for Explosive Growth

The Asia Pacific region is on the cusp of a major expansion in the 3D printing medical device software market. This growth is driven by two primary forces: a vast pool of talented individuals and the strategic move by international companies to establish a presence in the region. China claims the top spot within the Asia Pacific market, while India exhibits the most dynamic growth.

Key Takeaways for Market Report Purchasers

• Gain valuable insights into the growth factors and trends shaping the 3D Printing Medical Device Software Market.

• Analyze the different market segments to identify the most lucrative investment opportunities.

• Understand the impact of current events like the Russia-Ukraine war and economic slowdowns on the market.

• Gain competitive intelligence by studying the strategies of key players in the market.

• Access valuable data and forecasts to make informed business decisions about the 3D Printing Medical Device Software Market.

Purchase 3D Printing Medical Device Software Market Report @ <u>https://www.snsinsider.com/checkout/2599</u>

Table of Content Chapter 1 Introduction Chapter 2 Research Methodology Chapter 3 3D Printing Medical Device Software Market Dynamics Chapter 4 Impact Analysis (COVID-19, Ukraine- Russia war, Ongoing Recession on Major Economies) Chapter 5 Value Chain Analysis Chapter 6 Porter's 5 forces model **Chapter 7 PEST Analysis** Chapter 8 3D Printing Medical Device Software Market Segmentation, By Type Chapter 9 3D Printing Medical Device Software Market Segmentation, By Function Chapter 10 3D Printing Medical Device Software Market Segmentation, By Application Chapter 11 3D Printing Medical Device Software Market Segmentation, By End User **Chapter 12 Regional Analysis** Chapter 13 Company profile Chapter 14 Competitive Landscape Chapter 15 Use Case and Best Practices Chapter 16 Conclusion Continued...

Other Trending Report <u>Pharma 4.0 Market Outlook</u> <u>Respiratory Syncytial Virus (RSV) Therapeutics Market Outlook</u>

Akash Anand SNS Insider Pvt. Ltd +1 415-230-0044 email us here Visit us on social media: Facebook X LinkedIn Instagram YouTube

This press release can be viewed online at: https://www.einpresswire.com/article/716789065 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. © 1995-2024 Newsmatics Inc. All Right Reserved.