

Global 3D Printing Market Opportunity Analysis

https://marketpublishers.com/r/GD839892D0AEN.html Date: November 2013 Pages: 60 Price: US\$ 800.00 (Single User License) ID: GD839892D0AEN

Abstracts

Please note: extra shipping charges are applied when purchasing Hard Copy License depending on the location.

3D printing technology is considered to be one of the fastest growing technologies with numerous uses and applications for 3D printers and services across different application sectors. It has revolutionized various industries such as medical, aerospace, consumer products and automotive. This technology facilitates the printing of products of finest quality with highest accuracy by building the prototype in a layer-by-layer manner. While this technology is currently used for prototyping and basic product design, customization will emerge as the synonymous term for this technology in the near future. This market is expected to witness approximately 20-25% annual revenue growth in future, largely driven by automotive, healthcare, aerospace and consumer markets.

With respect to the opportunity for 3D printing technology in different application sectors, it is observed that automotive and aerospace hold the highest share followed by healthcare and consumer sectors. Automotive sector was one of the early adopters of 3D printing technology, using it to make prototypes and other experimental parts and for small-scale production runs.

"Global 3D Printing Market Opportunity Analysis" research report by KuicK Research gives comprehensive insight on following issues related to development of global 3d Printing market:

Market Overview

Patent Analysis

3D Printing Market by Technology, Application & Region



Mergers, Acquisitions & Joint Ventures

Market Growth Drivers & Restraints

Key Growth Opportunities

Company Analysis: Business Overview & Product/Solutions



Contents

1. EXECUTIVE SUMMARY

2. 3D PRINTING MARKET INTRODUCTION

- 2.1 Market Overview
- 2.2 Market Share Analysis of Key Players
- 2.3 Patent Analysis

3. 3D PRINTING MARKET BY TECHNOLOGY

- 3.1 Introduction
- 3.2 Electron Beam Melting
- 3.3 Fused Deposition Modelling
- 3.4 Selective Laser Sintering
- 3.5 Photopolymerization/ PolyJet/ Stereolithography
- 3.6 Powder Based Inkjet Printing

4. 3D PRINTING MARKET BY APPLICATION

- 4.1 Automotive
- 4.2 Aerospace & Defense
- 4.3 Consumer
- 4.4 Medical
- 4.5 Other Applications
- 4.6 Future Applications of 3D Printing Technology

5.3 D PRINTING MARKET BY REGION

- 5.1 US
- 5.2 Europe
- 5.3 Asia

6. 3D PRINTING MARKET TRENDS

- 6.1 Mergers & Acquisitions
- 6.2 Joint Ventures/ Partnerships



7. 3D PRINTING MARKET DYNAMICS

7.1 Growth Drivers

- 7.1.1 Increased Competition
- 7.1.2 Improved Design & Manufacturability
- 7.1.3 Highly Flexible Technology
- 7.1.4 Improved Economics Of Manufacturing

7.2 Market Restraints

- 7.2.1 High Initial Cost
- 7.2.2 Increased Sophistication
- 7.2.3 Regulatory Challenges
- 7.2.4 Material Limitations
- 7.3 Future Opportunities
 - 7.3.1 Direct Digital Manufacturing
 - 7.3.2 3D Printers
 - 7.3.3 3D Printing Service & Scanning Software
 - 7.3.4 Software

8. 3D PRINTING MARKET - COMPANY ANALYSIS

- 8.1 Stratasys
- 8.2 3D Systems Corporation
- 8.3 Voxeljet AG
- 8.4 Arcam AB
- 8.5 ExOne



List Of Figures

LIST OF FIGURES

Figure 1-1: Global 3D Printing Market (US\$ Billion), 2009-2013 Figure 1-2: 3D Printing Market Analysis Figure 2-1: Global 3D Printing Market Revenue (US\$ Billion), 2012-2020 Figure 2-2: 3D Printing Materials Market Share Analysis, 2013 & 2020 Figure 2-3: Photopolymers Market (US\$ Million), 2013-2020 Figure 2-4: Thermoplastics (Powder Form) Market (US\$ Million), 2013-2020 Figure 2-5: Thermoplastics (Solid Form) (US\$ Million), 2013-2020 Figure 2-6: Number Patents in 3D Printing Market, 2004-2011 Figure 2-7: Patents in 3D Printing Market by Company Figure 2-8: 3D Printing Patents Based on Techniques Figure 2-9: 3D Patents by Printing Technologies Figure 2-10: 3D Printing Based on Application/ Method of Manufacturing Figure 4-1: 3D Printing Market in Automotive Sector (US\$ Billion), 2012 & 2020 Figure 4-2: 3D Printing Market in Aerospace/ Defense Sector (US\$ Billion), 2012 & 2020 Figure 4-3: 3D Printing Market in Medical Sector (US\$ Billion), 2012 & 2020 Figure 5-1: 3D Printing Market Share by Region 2012 & 2020 Figure 5-2: US – 3D Printing Market (US\$ Billion), 2012 & 2020 Figure 5-3: Europe – 3D Printing Market (US\$ Billion), 2012 & 2020 Figure 5-4: Asia – 3D Printing Market (US\$ Billion), 2012 & 2020



About

3D printing is the process by which a three-dimensional object is developed using digital model. The difference between traditional manufacturing and 3D printing process lies in the process by which the objects are formed. Traditional process uses a subtractive approach that includes a combination of different activities such as forging, molding, grinding, gluing, welding, bending, cutting and assembling. For example, consider the case of manufacture of an adjustable wrench. Production process involves components forging, grinding, milling and assembling. The process involves wastage of some of the raw materials along the way and vast amount of energy during heating and reheating of the metal. Specialist tools and machines that are optimized to produce wrenches of a particular size are required. On the other hand, the case of 3D printing, an adjustable wrench can be produced in a single operation. The wrench comes out of the 3D printer completely assembled, including its moving parts. After some minimal amount of postproduction work such as baking and cleaning, the wrench is ready for commercial use.

The current use of 3D printing technology focus on small-scale models for industrial prototyping and product design, jigs and fixtures that are used in manufacturing processes and mass customization. With advancements in 3D printers, materials, scanners and other design tools, it is believed that there will be rapid penetration of 3D printing technology into other sectors such as architecture, jewelry design, industrial design, footwear, engineering and construction and education. 3D printing market is expected to witness approximately xx-xx% annual revenue growth for the next 4-5 years, largely driven by automotive, healthcare, aerospace and consumer markets. The market is expected to reach US\$ xx Billion by 2015 and US\$ xx Billion by 2020 in terms of revenue.

With respect to the opportunity for 3D printing technology in different application sectors, it is observed that automotive and aerospace hold the highest share accounting for approximately xx% of total sales. In 2012, 3D printed parts market achieved revenue of close to US\$. By 2020, the share of automotive applications in 3D printed parts market revenue is expected to drop to around xx%. It is expected that less mature application sectors will pick up pace and thus contribute around xx% to the overall 3D printing market revenue.

The 3D printing materials market is expected to reach approximately US\$ xx Million by the year 2020. The key materials used in 3D printing industry include thermoplastics



(solid), photopolymers, inkjet powders, metal powders and thermoplastic (powders). While the market for photopolymers will remain the largest segment of the market, other materials are expected to gain significant market share with the maturation of the technology from pure prototyping/ tooling applications to end product manufacture. Although metal powders are expected to witness the highest growth, the production volumes will remain relatively low. This is mainly attributed to the high cost associated with raw materials and processing. The market for 3D printing materials is observed to be largely dominated by some key suppliers thus enabling monopoly pricing and hindering the development of new materials. However, with the emergence of more and more innovative solutions using this technology, there will be downward pressure on material prices and higher entry by third party suppliers.



I would like to order

Product name: Global 3D Printing Market Opportunity Analysis Product link: https://marketpublishers.com/r/GD839892D0AEN.html Price: US\$ 800.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/GD839892D0AEN.html</u>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name: Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:

**All fields are required

Custumer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970