3D Printing in Medical Markets 2015: An Opportunity Analysis and Ten-Year Forecast

Description:
In this report the author identifies the main opportunities for 3D printing in the medical environments. It identifies where money is being made through the current use of 3D printers in this area and shows where the revenue streams will be found in the future. It also identifies current technical weaknesses in 3D printing and where 3D printers, software and services must adapt to become a commercial success. As the table of contents below shows this report provides coverage of all the current medical applications for 3D printing, along with granular ten-year forecasts of 3D printing in the medical sector in both volume and revenue terms.

3D printing will enhance the effectiveness of medical practice, creating many new revenue opportunities over the next decade. The author believes that 3D printing technology showed its power to create paradigm shifts in a medical field when 3D-printed hearing aid shells first hit the market. And we think that many more such paradigm shifts are on their way thanks to the power of what the author refers to as "3D printing-enabled medical technologies," which include 3D printing, medical imaging, and three-dimensional modeling. The outlook for medical use of 3D printing is evolving at an extremely rapid pace as medical manufacturers are beginning to utilize 3D printing in more advanced ways, specialty medical engineers are achieving incredible success in complex procedures through assistive 3D-printed models and guides, and patients around the world are experiencing improved quality of care through 3D-printed implants and prosthetics never before seen.

This report, builds on the extensive knowledge and publications in the “additive medicine” with even more data and analysis of more medical applications than before. The report concludes with an assessment of the medical related strategies of 15 leading 3D printer firms that have made medical/dental markets a critical part of their product offerings and market direction. The author believes that this report will provide invaluable guidance for 3D-printing equipment and software companies, service providers, specialty chemical firms and medical equipment firms. We also think that it will prove to be required reading for investors in the 3D-printing business as a whole.

Reasons to Buy this Report

- The market for 3D printed medical applications is as vast as it is complex, but not all applications hold realistic long term adoption potential. The author has categorized 3D printed medical components into distinct sub-categories to easily differentiate applications and compare which areas could achieve paradigm shifts, and which will remain niche.

- These Ten Year Forecasts for the medical sector include data specific both to 3D printing suppliers detailing printers by technology, materials by type, and software, but also includes values for a wide variety of specific medical applications including various implants, surgical tools, guides, medical models, medical devices and equipment prototypes, and more.

- Actionable intelligence is presented in a way that encompasses both the 3D printing industry and the global medical industry in order to help readers plan businesses against real, quantifiable data and strategic implications from analysts that know 3D printing.

- We aren't a market research company trying to apply expertise in other areas to 3D printing - we are 3D printing experts, and studying the 3D industry is all we do.

Contents:

Authors Note

Chapter One: Review of Opportunities, Users, Applications, and 3D Printing Medical Technology
1.1 Understanding Key Users of Printed Medical Parts
1.2 Recent Advancements in 3D Print Technology Relevant to Medical Applications
1.3 Customization for Medical Products
1.4 The Potential Emergence of DIY Medical Applications
1.5 Specialized 3D Printing Services Required for Medical Markets
1.6 The Power of 3: 3D Print Enabled Technologies
1.6.1 The Role of Medical Imaging In 3D-Printed Medical Applications
1.6.2 The Importance and Opportunity for Medical Software in 3D Printed Medical Applications
1.7 Opportunities to Supply Materials Into the 3D-Printed Medical Market
1.8 Assessment for 3D Printing In Medical Markets by Geography
1.9 Summary of Ten-Year Forecasts for 3D Printed Medical Markets

Chapter Two: Examination of Medical Applications for 3D Printing

2.1 Medical Modeling
2.1.1 Value of 3D Printed Models to Medical Professionals
2.1.2 3D Printing is Re-Inventing the Medical Model Product Category
2.1.3 Medical Modeling Opportunities and the Influence of Health Insurance and Government Agencies
2.1.4 Isolating Real Opportunities in Medical Modeling
2.1.4 10 Year Forecast & Outlook for Medical Models
2.2 Orthopedic Implants
2.2.1 Different Materials Used and Strategic Implications
2.2.2 Adoption Is Driven by Applications that Offer Superior Performance and/or Lower Cost
2.2.3 Cranio-maxillofacial Implants
2.2.4 Acetabular Hip Cup Implants
2.2.5 Other Orthopedic Implants
2.2.6 Ten-Year Forecast of 3D Printed Implants
2.3 Medical Prosthetics
2.3.1 Hearing Aid Shells
2.3.2 Prosthetic Limbs and Fairings
2.3.4 3D Printed Fracture Braces
2.3.3 Ten-Year Forecasts of 3D Printed Prosthetics
2.4 Surgical Guides, Tools, and Other Medical Professional Assistance Parts
2.4.1 Surgical Cutting Guides, Drill Guides, and Bespoke Tools
2.4.2 Ten-Year Forecasts of 3D Printed Guides & Bespoke Tools
2.5 Biomedical Scaffold Systems
2.5.1 Ten-Year Forecasts of 3D Printed Biomedical Funding
2.6 Ophthalmic and Orthotic Applications
2.6.1 3D Printed Frames & Prescription Lenses
2.6.2 3D Printed Orthotic Insoles
2.6.3 Ten Year Forecast for 3D Printed Ophthalmic and Orthotic Applications
2.7 Medical Device Manufacturing and Prototyping
2.7.1 Advancing Medical Device Production with 3D Printed Injection Molding
2.7.2 10 Year Forecast for Medical Manufacturing and Device Prototyping Applications
2.8 Summary of Medical Applications

Chapter Three: Key Firms to Watch for 3D Printing in Medical Markets

3.1 3D Systems
3.2 Arcam
3.3 EnvisionTEC
3.4 EOS
3.5 e-Nable
3.6 Innovation MediTech
3.7 Materialise
3.8 Optomec
3.9 Organovo
3.10 Rapid Shape
3.11 Renishaw
3.12 Stratasys Ltd
3.13 Worrell

Chapter Four: Summary of Ten-Year Forecasts for 3D Printing Technology, Materials & Software

4.1 Ten Year Forecasts of 3D Printers Installed and Shipped in the Medical Sector
4.2 Ten Year Forecasts of 3D Printing Software in the Medical Sector
4.3 Ten Year Forecasts of 3D Printing Materials Consumed Annually by the Medical Sector
4.3 Thermoplastics
4.3.2 Photopolymers
4.3.3 Metal Powders
4.3.4 Other Print Materials
4.4 Market Summary by Geography

About the Analyst

List of Exhibits
Exhibit 1-1: Current Adoption Level for Major Medical Components by Group
Exhibit 1-2: Potential Adoption Level for Major Medical Components by Group
Exhibit 1-4: Total 3D Printing Medical Market Value, 2014-2024
Exhibit 2-1: Opportunities in 3D Printed Medical Models
Exhibit 2-2: Potential Adoption Level for Medical Professional Assistance Parts
Exhibit 2-3: Total 3D Printed Medical Models by Type, 2014-2024
Exhibit 2-4: Total Revenue of 3D Printed Medical Models by Type, 2014-2024
Exhibit 2-5: Beneficial Traits of 3D-Printed Orthopedic Implants
Exhibit 2-6: 3D Printable Implant Material Comparison
Exhibit 2-7: Other Orthopedic Implants Being Explored By 3D Printing
Exhibit 2-8: Potential Adoption Level for 3D Printed Medical Implants
Exhibit 2-9: Total 3D Printed Implant Parts by Type, 2014-2024
Exhibit 2-10: Total Revenue 3D Printed Implant by Type, 2014-2024
Exhibit 2-11: Factors Limiting New Revenue Opportunities in Hearing Aids
Exhibit 2-12: Benefits 3D Printing Can Bring To The Prosthetics Market
Exhibit 2-13: Potential Adoption Level for 3D Printed Prosthetic Parts
Exhibit 2-14: Total 3D Printed Prosthetic Parts by Type, 2014-2024
Exhibit 2-15: Total Revenue 3D Printed Prosthetic Parts by Type, 2014-2024
Exhibit 2-16: Total 3D Printed Hearing Aid Shells, 2014-2024
Exhibit 2-17: Total Revenue 3D Printed Hearing Aid Shells, 2014-2024
Exhibit 2-18: Potential Adoption Level for 3D Printed Surgical Guides & Tools
Exhibit 2-19: 3D Printed Surgical Cutting Guides & Drill Guides/Tools, 2014-2024
Exhibit 2-20: Total Revenue Surgical Cutting Guides & Drill Guides/Tools, 2014-2024
Exhibit 2-21: Potential Adoption Level for Biomedical Applications
Figure 2-22: Total New Annual Investment in Bio-Printing, 2014-2024
Exhibit 2-23: Potential Adoption Level for 3D Printed Ophthalmic & Orthotic Solutions
Exhibit 2-24: Total Revenue 3D Printed Ophthalmic/Orthotic by Type, 2014-2024
Exhibit 2-25: Total 3D Printed Ophthalmic/Orthotic Parts by Type, 2014-2024
Exhibit 2-26: Potential Adoption for 3D Printing Medical Manufacturing Applications
Exhibit 5-1: Total Medical 3D Printers Sold Annually by Print Technology, 2014-2024
Exhibit 5-2: Total Medical 3D Printer Revenue by Technology, 2014-2024
Exhibit 5-3: Total Plastic and Metal Printer Units, 2014-2024
Exhibit 5-4: Total Medical Printer Install Base, 2014-2024
Exhibit 5-5: Total Medical 3D Printer Software Revenue, 2014-2024
Exhibit 5-6: Total 3D Print Materials Revenue by Material Group, 2014-2024
Exhibit 5-7: Total 3D Printed Materials Shipments by Material Group, 2014-2024
Exhibit 5-8: Thermoplastic Filament Material Revenue by Subgroup, 2014-2024
Exhibit 5-9: Thermoplastic Powder Revenue by Subgroup, 2014-2024
Exhibit 5-10: Photopolymer Material Revenue, 2014-2024
Exhibit 5-11: Metal Powder Material Revenue by Subgroup, 2014-2024
Exhibit 5-12: Other Material Revenue by Subgroup, 2014-2024
Exhibit 5-13: Total 3D Printing Medical Market Value by Geography, 2014-2024

Ordering:
Order Online - http://www.researchandmarkets.com/reports/3096581/
Order by Fax - using the form below
Order by Post - print the order form below and send to
Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct and select the format(s) you require.

Product Name: 3D Printing in Medical Markets 2015: An Opportunity Analysis and Ten-Year Forecast
Web Address: http://www.researchandmarkets.com/reports/3096581/
Office Code: SCDKRU4

Product Formats
Please select the product formats and quantity you require:

<table>
<thead>
<tr>
<th>Format</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic (PDF) - Single User</td>
<td></td>
<td>USD 3995</td>
</tr>
<tr>
<td>Electronic (PDF) - 1 - 5 Users</td>
<td></td>
<td>USD 4995</td>
</tr>
<tr>
<td>Electronic (PDF) - Enterprisewide</td>
<td></td>
<td>USD 5995</td>
</tr>
</tbody>
</table>

Contact Information
Please enter all the information below in BLOCK CAPITALS

Title: [Mr] [Mrs] [Dr] [Miss] [Ms] [Prof] [ ]
First Name: ___________________________________________ Last Name: _______________________________________
Email Address: * _______________________________________
Job Title: _____________________________________________
Organisation: __________________________________________
Address: ______________________________________________
City: __________________________________________________
Postal / Zip Code: _______________________________________
Country: _______________________________________________
Phone Number: __________________________________________
Fax Number: ____________________________________________

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:

Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer: Please transfer funds to:

Account number 833 130 83
Sort code 98-53-30
Swift code ULSBIE2D
IBAN number IE78ULSB98533083313083
Bank Address Ulster Bank,
27-35 Main Street,
Blackrock,
Co. Dublin,
Ireland.

If you have a Marketing Code please enter it below:

Marketing Code: __________________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp

Please fax this form to:
(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World