3D SYSTEMS
Investor Day

May 16, 2022

Detroit, Michigan

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3D SYSTEMS



Melanie Solomon

Investor Relations

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Forward Looking Statements

Certain statements made in this presentation that are not statements of historical or current facts are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the company to be materially different from historical results or from any future results or projections expressed or implied by such forward-looking statements. In many cases, forward looking statements can be identified by terms such as "believes," "belief," "expects," "may," "will," "estimates," "intends," "anticipates" or "plans" or the negative of these terms or other comparable terminology. Forward-looking statements are based upon management's beliefs, assumptions and current expectations and may include comments as to the company's beliefs and expectations as to future events and trends affecting its business and are necessarily subject to uncertainties, many of which are outside the control of the company. The factors described under the headings "Forward-Looking Statements" and "Risk Factors" in the company's periodic filings with the Securities and Exchange Commission, as well as other factors, could cause actual results to differ materially from those reflected or predicted in forward-looking statements. Although management believes that the expectations reflected in the forward-looking statements are reasonable, forward-looking statements are not, and should not be relied upon as a guarantee of future performance or results, nor will they necessarily prove to be accurate indications of the times at which such performance or results will be achieved. The forward-looking statements included are made only as the date of the statement. 3D Systems undertakes no obligation to update or revise any forward-looking statements made by management or on its behalf, whether as a result of future developments, subsequent events or circumstances or otherwise, except as required by law

Further, we encourage you to review "Risk Factors" in Part 1 of our Annual Report on Form 10-K and Part II of our Quarterly Reports on Form 10-Q filed with the SEC as well as other information about us in our filings with the SEC. These are available at www.SEC.gov.

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Jeff Graves

Chief Executive Officer

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An Exciting Agenda for Today…

01	Our Team, our Company and our Future	Jeff Graves
02	Healthcare Solutions	Menno Ellis
03	Industrial Solutions	Reji Puthenveetil
04	Oqton	Ben Schrauwen
05	Engineering and Application Innovation	David Leigh
06	Translation to Financial Performance	Wayne Pensky
07	Q&A Panel (end of webcast)	All
08	Regenerative Medicine and Bioprinting (Dinner Event)	Bagrat Grigoryan Katie Weimer

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Strong Executive Leadership Team



Jeff Graves

President and Chief Executive Officer



Wayne Pensky

Interim Chief Financial Officer



Reji Puthenveetil

Executive Vice President, Industrial Solutions



Menno Ellis

Executive Vice President, Healthcare Solutions



David Leigh

Chief Technology Officer, Additive Manufacturing



Chuck Hull

Chief Technology Officer, Regenerative Medicine



Andrew Johnson

Chief Legal Officer



Phyllis Nordstrom

Chief People, Culture and Compliance Officer

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3D Systems: Company Rebirth for an Even Stronger Future

1986 - 2020 → **July 2020** → **2021 and Beyond** →

4 Non-Core Businesses (Exited)

- Printers
- Materials
- Software



Focus

High Value Growth Markets with Significant Barriers to Entry

Industrial Solutions

Healthcare Solutions

- *Bioprinting (Laboratories)*
- *Regenerative Medicine (Humans)*

Reorganized, Lean, Focused and Growing

Excellent Balance Sheet to Support Future Growth Investments

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3D Systems: Who We Are and Who We Serve

3D Systems Today

1,900+
Employees worldwide

20+
Market segments served

1,000+
Patents issued

80+
Application Engineers

Largest dedicated **sales & service** organization

Broadest Range of AM Solutions Technologies

- **7** metal and polymer printing platforms
- **2** major bioprinting platforms
- **130+** Production Materials
- **Most** extensive **software** platforms

Delivering Value to our Customers

20,000+
Production printers active today

35,000+
Printers sold over time

30,000+
Customers served each year

4,800+
Tons of proprietary materials consumed per year

1,000,000+
Parts per day printed with our technology

Deepest Experience with Production Requirements

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Advantages of Additive Drive Industry Growth

Why Additive?



01 Design Flexibility



03 Mass Customization

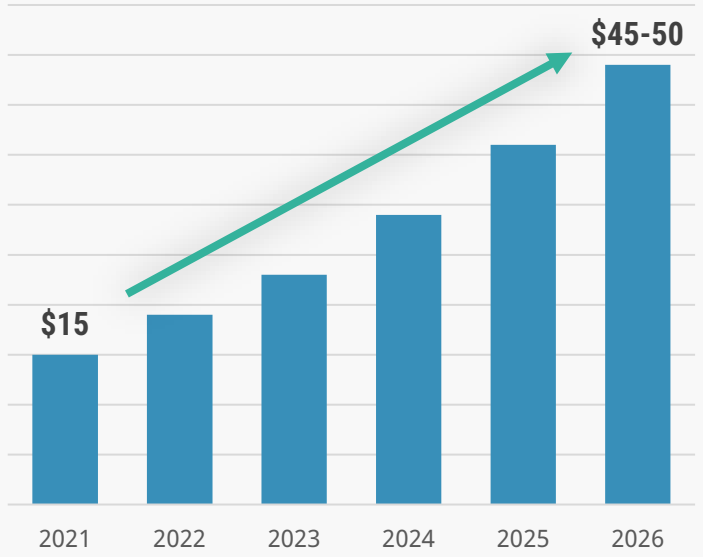


02 Low Volume Parts & Faster Product Cycles



04 Supply Chain Flexibility

3D Printing Market Size ($B)[1]



1. Market includes hardware, software, materials and printing services. Median of estimates by Markets & Markets, Grandview Research, Fortune Business Insights, Allied Market Research, Emergen Research, Arizton, Guggenheim and Wohlers

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Additive Manufacturing is Transforming Existing Industries…

Aerospace & Defense



- Low Volume Interior Components
- Light-weighting & Complex Geometries for Structural Components
- Lower Cost & Faster Custom Tooling
- Maintenance & Repair Operations

Automotive



- Faster Product Development
- Tooling Aids
- Complex Geometries for Strength & Cooling Capabilities
- Custom Parts

Healthcare



- Patient Specific Devices & Implants
- Digital Dentistry
- Customized Surgical Planning
- Assistive Technologies

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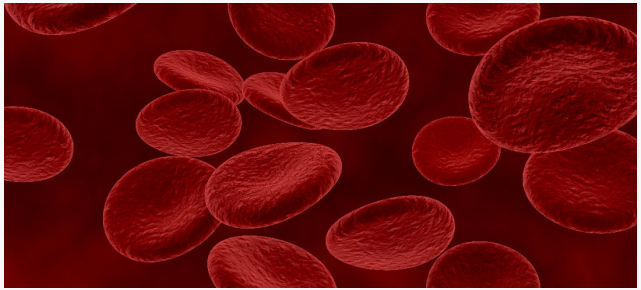
And Creating Entirely New Ones…

Bioprinting for Laboratory Applications



- Academic Labs for the Study of Regenerative Medicine (printers & consumables for research)
- Three-dimensional vascularized cell structures for the development of new drug therapies
- Cellular samples for development of skin care products

Regenerative Medicine for Human Applications



- Solid human organs to address critical illness and extend life (lungs, livers, kidneys, other)
- Printed human tissues to address damage induced by trauma, disease, or genetic defects (arteries, bones, soft tissue, skin, etc)

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Leading and Differentiated in the Market

		Larger Competitors	Point Solutions
Application expertise and advanced manufacturing proving grounds	✓	SOME	✗
Robust range of technologies in polymers and metals	✓	✗	✗
Scale and footprint to serve global organizations	✓	✓	✗
Software to manage additive manufacturing environment	✓	SOME	LIMITED
Materials options to handle range of customer requirements	✓	SOME	LIMITED

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Our Strategic Focus

Purpose

Deliver leading additive solutions for industrial and healthcare applications

Business Strategy

Enhance core Healthcare and Industrial businesses & expand Software and RegMed

Grow Gross Profit Faster Than Revenue

Execution

Strategic Focus

New Solution Revenue	Recurring Revenue	Manufacturing Excellence
Design | Innovate | Launch	Materials | Service | Software	Cost | Quality | Delivery

Culture

Candor	Focus	Speed	Innovation	Efficiency	Accountability

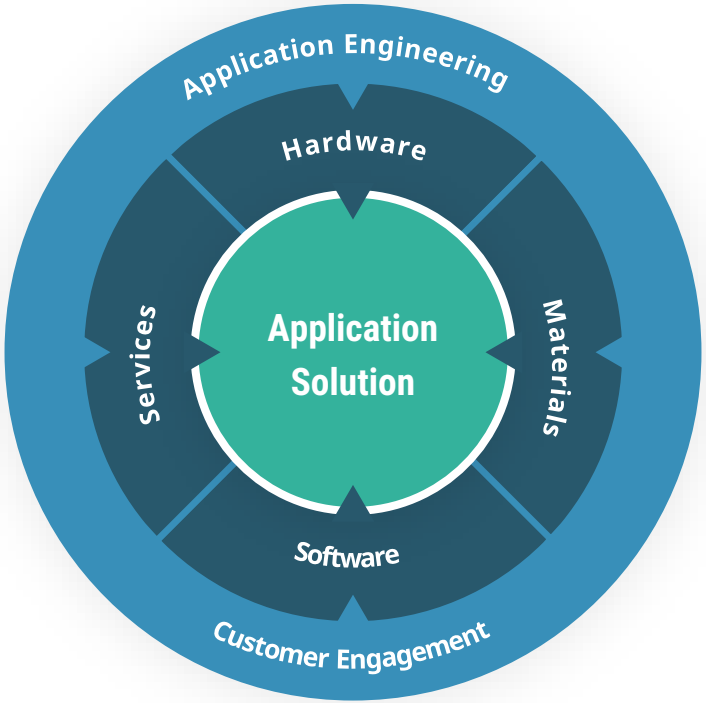
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Most Comprehensive Product Portfolio in the Industry

9
Printer Platforms

10
Software Solutions

37
Printer Models



80+
Application Engineers

130+
Materials

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Our Solutions Approach Leverages Our Significant Scale



Explore

Strategic consulting to identify customer needs

Innovate

Joint applications development and design for additive

Develop

QA and process characterization from pre-prototype through prototype

Validate

Training, validation, and certification

Produce

Production and manufacturing services

Scale

Scale up and technology transfer

- Application Engineers
- Multiple Print Technologies
- Multiple Materials Options
- Software For Simulation Optimization and Production Management
- Certification Experts & Experience
- Advanced Mfg “Proving Grounds”
- Global Installation and Technical Support

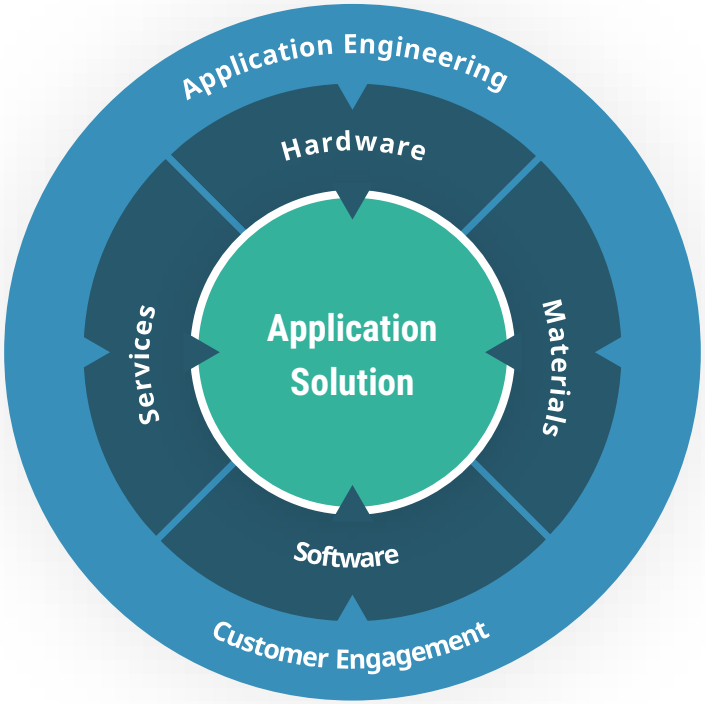
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Capabilities to Solve Problems in Multiple Large Segments

Automotive	RODIN CARS, LUCID, BWT ALPINE F1® TEAM
Aerospace	AIRBUS, GENERAL ATOMICS AERONAUTICAL, esa
Manufacturing	ASML, JABIL, WILTING, nLIGHT
Healthcare	rms, IGNITE ORTHOPEDICS, Paragon Medical
Bioprinting	United Therapeutics CORPORATION, Massachusetts Institute of Technology, Imperial College London, ETH ZÜRICH, BWH

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Advancing Innovation Through Our Culture



01 Attracting Industry Experts

02 Expanding Talent Diversity

03 Enabling an Inclusive Workplace

04 Developing Leaders of the Future

05 Modernizing Ways of Working

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Sustainability Programs

Vison → Innovating for a Sustainable World

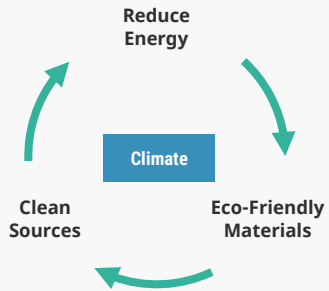
People

Advancing innovation through our people



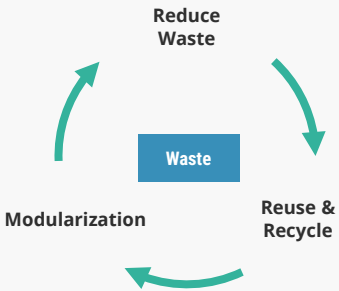
Climate

Developing solutions to use resources responsibly



Waste

Implementing actions to reduce and eliminate waste



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Investment Thesis

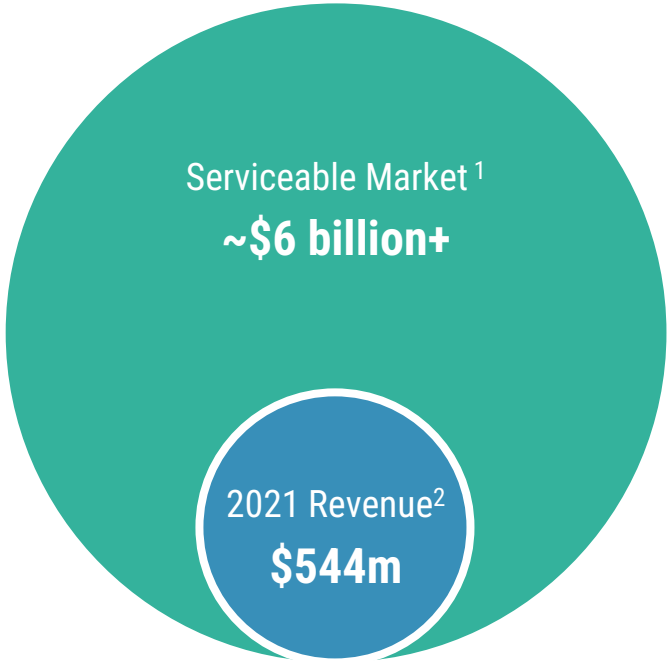
3D Differentiators

01 Relentless AM application focus in high value markets

02 Broadest range of hardware (metal and polymer), software and materials

03 Scale to support customer needs from inception to fleet production

Large and growing AM Market



Best-positioned AM company in the high-growth markets we serve

1. Company estimates
2. Adjusted for divestitures

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Investor Day

Healthcare Solutions

Menno Ellis

Executive Vice President
Healthcare Solutions

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Agenda

Healthcare Solutions Group at a Glance

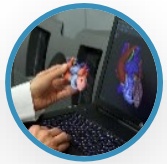
Critical Healthcare Challenges and Our Approach



3D Printing Better Medical Devices



Personalizing Medicine… with OEM’s



Personalizing Medicine… at the Point of Care



Accelerating Pharmaceutical Development

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30+ Years of Healthcare Industry Leadership

150K+
Patient-matched cases & devices delivered

2M+
Medical devices manufactured

100+
FDA cleared & CE marked devices supported

1500+
Patents applied/granted

bsi
ISO 13485
Quality Management for Medical Devices
CERTIFIED

100+
Engineers dedicated to patient-specific applications

Partners to category leaders in dental, spine, orthopedics, and craniomaxillofacial

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Broadest Coverage in Industry…and Expanding

Growing in Today's Markets

Orthopedics



Craniomaxillofacial



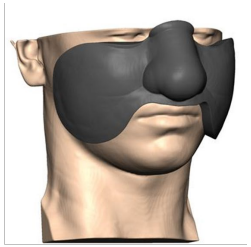
Dental



Identifying and Penetrating New Markets

Radiation Oncology





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Strong Business Performance & Attractive Markets

Healthcare Segment

20%
2019-2021 CAGR[1]

$274m
2021 Revenue[1]

Strong margins

Growing in Today's Markets

Medical Devices

41%
of 2021 Segment Revenue[1]

$2.5 - $3b
Addressable Market

Dental

59%
of 2021 Segment Revenue[1]

$0.5 - $1b
Addressable Market

Emerging Business

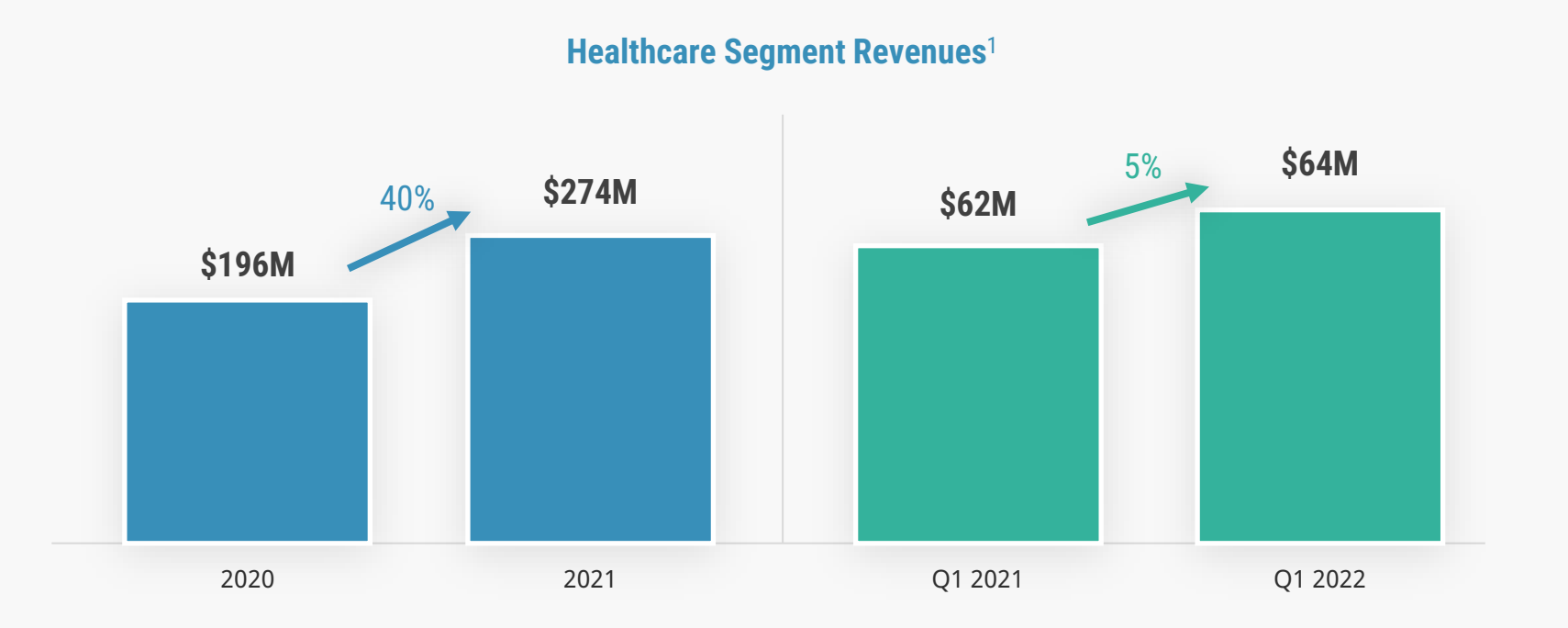
Bioprinting

- Drug Discovery & Development
- Research Platforms

1. Adjusted for divestitures

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Compelling Growth



1. Adjusted for divestitures

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Challenges in Healthcare Today

Escalating Cost[1]

2x CPI
Hip & knee replacement costs

89%
Inpatient surgical care costs

Outcome shortfalls

14%
overall hospital readmission rate

1m
hospital readmissions annually following orthopedic surgeries

Ageing Demographics

Age 65+ population to grow from

48m→88m

by 2050

Greater Patient Expectations

Quality of life expectations despite

increase

in lifestyle / degenerative disease



1. 2008-2018

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Well-Positioned to Address Challenges

Escalating Cost[1]

Outcome shortfalls

Ageing Demographics

Greater Patient Expectations

Enabled through 3D Printing

- Improved surgical outcomes
- Surgical time savings and cost savings
- Addressing unmet patient needs



1. 2008-2018

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3D Printing Better Medical Devices

Subtractive manufacturing challenges

01 Production cost

02 Bone regrowth and time of implant stability

03 Patient discomfort and joint performance



Non-personalized Devices



1,000s of different products

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Comprehensive and Flexible Approach for Medical Device OEM's

Explore

Strategic consulting to identify customer needs

Innovate

Joint applications development and design for additive

Develop

QA and process characterization from pre-prototype through prototype

Validate

Training, validation, and certification

Produce

Production and manufacturing services

Scale

Scale up and technology transfer

- Application Innovation Group
- Advanced Manufacturing
- Specialized Business Development

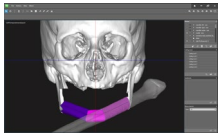




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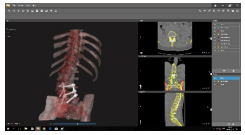
Personalizing Medicine Amplifies Patient Benefits and Efficiencies

Craniomaxillofacial





Orthopedic



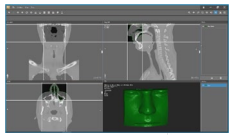






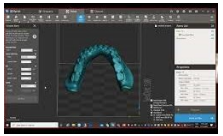


Radiation Oncology





Dental











Three-dimensional Printed Drill Guides Versus Fluoroscopic-guided Freehand Technique for Pedicle Screw Placement

A Systematic Review and Meta-analysis Operative, and Clinical Outcomes

Wallace, Nicholas MD; Butt, Bilal B. MD; Aleem, Ilyas MD, MSc

Author Information

Clinical Spine Surgery: October 2020 - Volume 33 - Issue 8 -

WJO World Journal of Orthopedics

Submit a Manuscript: https://www.f6publishing.com World J Orthop 2022 March 18; 13(3): 230-237

DOI: 10.5312/wjo.v13.i3.230 ISSN 2218-5836 (online)

MINIREVIEWS

Patient-specific instrumentation in total ankle arthroplasty

Antonio Mazzotti, Alberto Arceri, Simone Zielli, Simone Bonelli, Valentina Viglione, Cesare Faldini

A PARADIGM SHIFT IN ORTHOGNATHIC SURGERY: A SPECIAL

MARCH 01, 2011

Virtual Model Surgery for Efficient Planning and Surgical Performance

Suzanne U. McCormick, MS, DDS

DOI: https://doi.org/10.1016/j.joms.2010.10.047

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CLINICAL ARTICLE

Application of 3D-printed Customized Guides in Subtalar Joint Arthrodesis

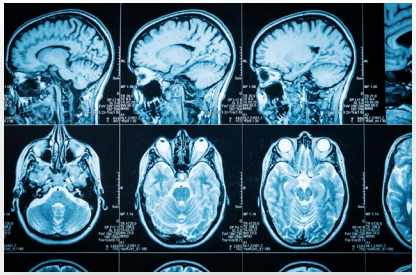
Xiao-jun Duan, MD[1], Hua-quan Fan, BE[1], Fu-you Wang, MD[1], Peng He, ME[2], Liu Yang, MD[1]

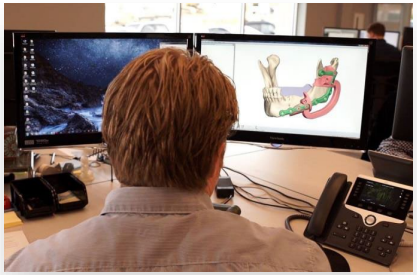
[1]Center for Joint Surgery, Southwest Hospital, Third Military Medical University (Army Medical University) and [2]Chongqing Institute of Optics and Mechanics, Chongqing, China

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Two Decades of Virtual Surgical Planning Experience Driving our Efforts in Key Markets

Patient Data → Plan → Design → Manufacture → Inspect → Deliver





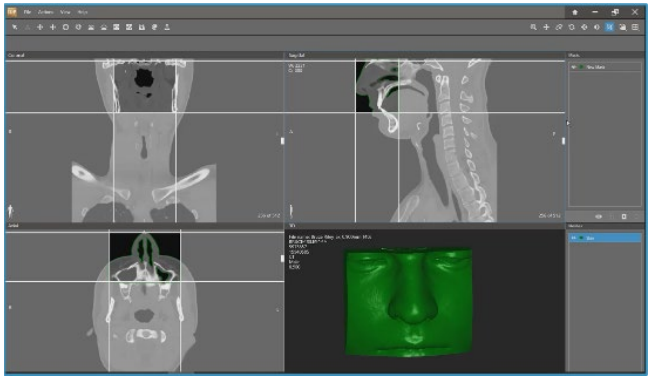




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Identifying and Penetrating New Segments

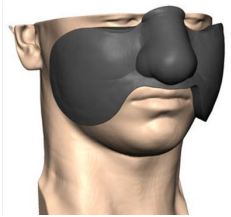
Radiation Oncology













Cancer Medicine

Open Access

RESEARCH ARTICLE | Open Access

A clinical trial to compare a 3D-printed bolus with a conventional bolus with the aim of reducing cardiopulmonary exposure in postmastectomy patients with volumetric modulated arc therapy

Yun Zhang, Yuling Huang, Shenggou Ding, Jinghui Liang, Jie Kuang, Qingfeng Mao, Weiliang Ying, Yuxian Shu, Jingao Li, Chunling Jiang

First published: 23 December 2021 | https://doi.org/10.1002/cam4.4496

3D PRINTING OF BOLUS | VOLUME 121, ISSUE 1, P148-153, OCTOBER 01, 2016

Clinical implementation of 3D printing in the construction of patient specific bolus for electron beam radiotherapy for non-melanoma skin cancer

Richard A. Canters [1] • Irene M. Lips [1] • Markus Wendling • ... Rianne M. Gerritsen • Philip Poortmans • Cornelia G. Verhoef • Show all authors • Show footnotes

Published: July 27, 2016 • DOI: https://doi.org/10.1016/j.radonc.2016.07.011 • Check for updates

"The implemented workflow is feasible, patient friendly, safe, and results in high quality dose distributions. This new technique increases time efficiency."

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Sound Fundamentals Continue Fueling Dental Adoption of 3D Printing

Traditional Casting / Milling



- Wasted materials & increased cost
- Complex process reliant on operator skill
- Design flexibility limitations
- Long or inconsistent turnaround time
- Fitting requires repeat patient visits

3D Printed Workflow



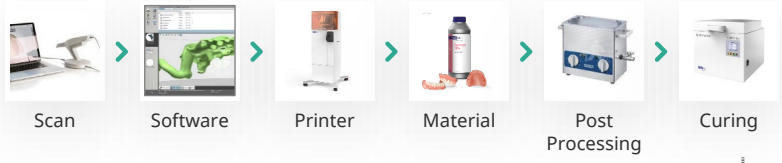
- **Predictable, low-waste digital workflow**
- **Cost reductions up to 75%**
- **Up to 60% reduction in patient visits**
- **Enables more complex designs**
- **Faster turnaround = higher patient satisfaction**

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Uniquely Positioned in Light of Market Leading Breadth and Experience

Fully integrated & certified solution enables seamless adoption

- Proven and trusted end-to-end workflows



- Broadest printer portfolio



- Innovative market-leading materials



- In-house + on-site training and hands-on service & support





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Enabling the Broadest Range of Indications

Application	Customer and 3D Systems Solution		
	OEM/Large Dental Lab	Mid/Small Dental Lab	DSO/ Dental Clinic
Orthodontics			
Prosthodontics			
Implantology			

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Point of Care Adoption Driven by Sound Fundamentals

01

Improved patient outcomes

02

Less time in the operating room

03

Reduced costs

04

Supply chain control

05

Address unmet patient needs







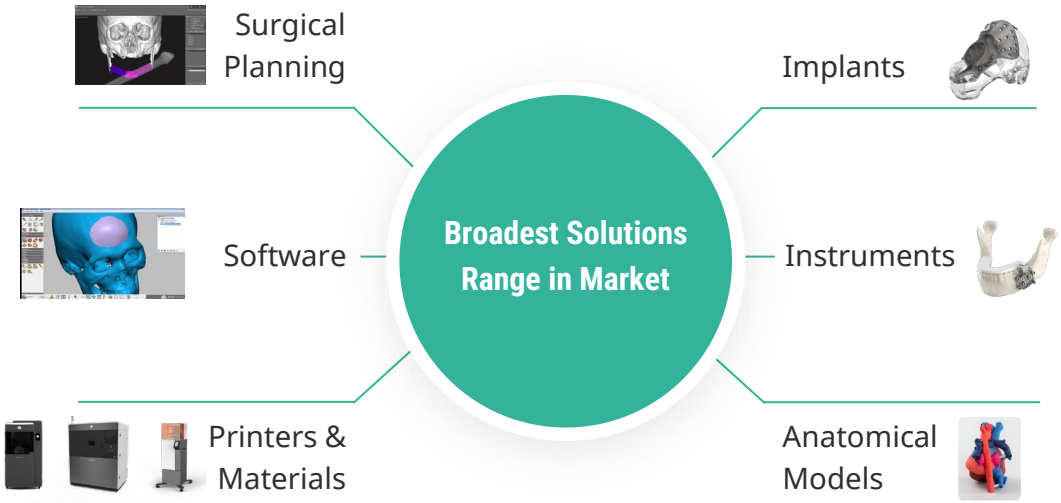


Nascent market poised for rapid growth pending reimbursement and regulatory considerations

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Deploying the Industry's Broadest Range of Solutions

Broadest Solutions Range in Market



Flexible Deployment Model

On-site Managed Services

Collaborative Solutions

Training and Deployment

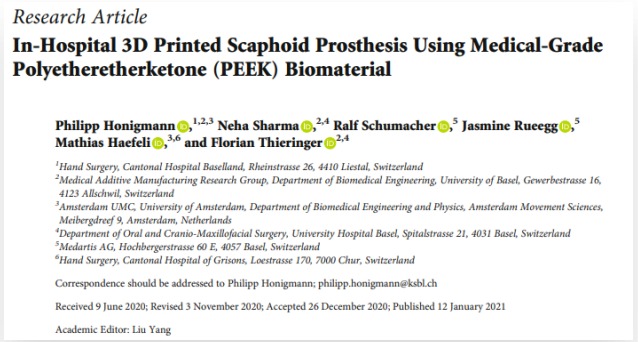
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First-to-Market Opportunity in Point of Care

Anticipating first-to-market regulatory clearance for 3D printed PEEK

- Suitable for in-hospital placement

- Leverages 3D Systems market leadership
  - Titanium spinal implant business
  - New materials expertise



Research Article

In-Hospital 3D Printed Scaphoid Prosthesis Using Medical-Grade Polyetheretherketone (PEEK) Biomaterial

Philipp Honigmann [1,2,3] Neha Sharma [2,4] Ralf Schumacher [5] Jasmine Rueegg [5] Mathias Haefeli [3,6] and Florian Thieringer [2,4]

[1]Hand Surgery, Cantonal Hospital Baselland, Rheinstrasse 26, 4410 Liestal, Switzerland
[2]Medical Additive Manufacturing Research Group, Department of Biomedical Engineering, University of Basel, Gewerbestrasse 16, 4123 Allschwil, Switzerland
[3]Amsterdam UMC, University of Amsterdam, Department of Biomedical Engineering and Physics, Amsterdam Movement Sciences, Meibergdreef 9, Amsterdam, Netherlands
[4]Department of Oral and Cranio-Maxillofacial Surgery, University Hospital Basel, Spitalstrasse 21, 4031 Basel, Switzerland
[5]Medartis AG, Hochbergerstrasse 60 E, 4057 Basel, Switzerland
[6]Hand Surgery, Cantonal Hospital of Grisons, Loestrasse 170, 7000 Chur, Switzerland

Correspondence should be addressed to Philipp Honigmann; philipp.honigmann@ksbl.ch

Received 9 June 2020; Revised 3 November 2020; Accepted 26 December 2020; Published 12 January 2021

Academic Editor: Liu Yang







CMF Implants
(PEEK)

Spinal Implants
(PEEK + resorbable inlay)



Spinal Trial Implant
(PPSU filled with barium sulfate)





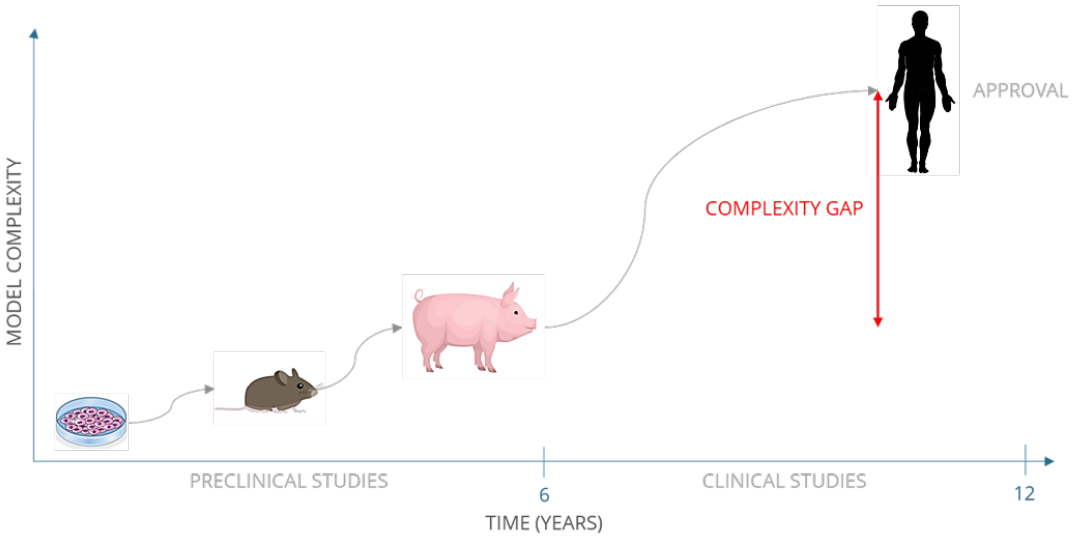
Trauma Bone Plates
(Fiber-reinforced PEEK)



KUMOVIS

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Limitations of Current Pharmaceutical Development Model



9 in 10
Drugs fail clinical trials

$2.6b
Per drug approved

12 years
For FDA approval

Bioprinted human tissue offers compelling alternative

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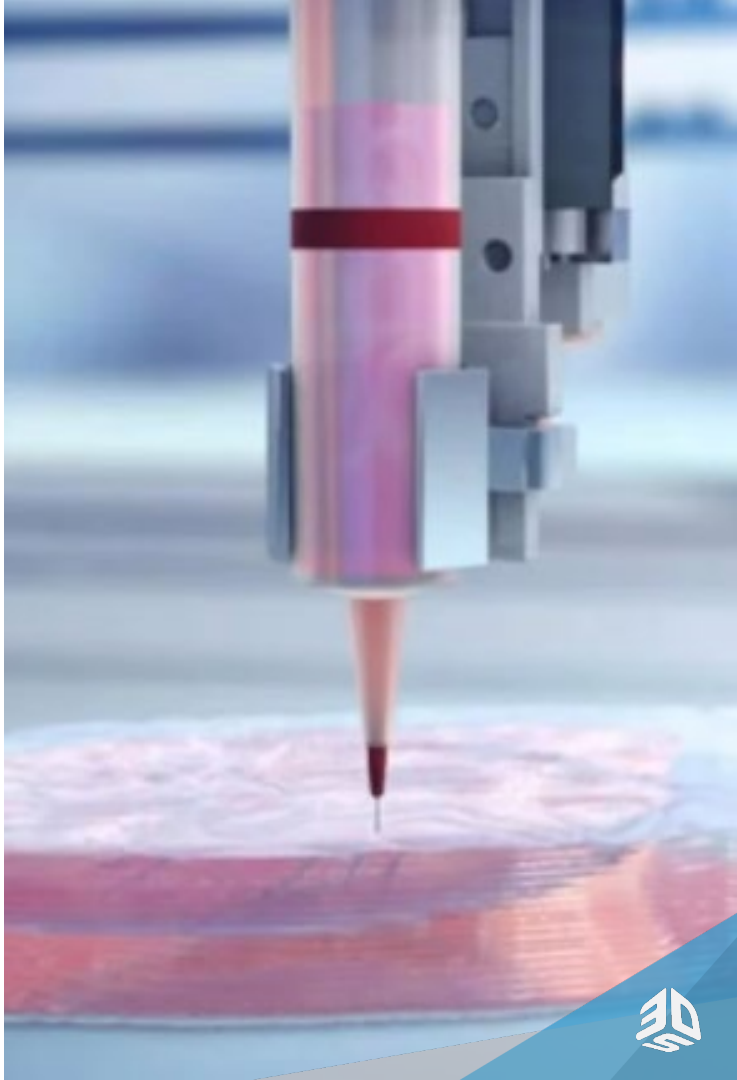
Bioprinting to Accelerate and Address Current Pharmaceutical Development Limitations

Advantages of Bioprinting

Added complexity earlier in the testing process

Potential to scale up for high-throughput screening

Path towards reduction of animal testing



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3D Systems Engagement Model Taking Shape

Research Platform

- 500+ labs, 40+ countries
- 200+ user publications

ALLEVI

Drug Discovery & Development

- Breakthrough technology for use in preclinical drug discovery and development
- Opportunities for applications in personalized medicine

Go-to-Market Approach

- **Product Sales**
- **Services**
- **Pharmaceutical partnerships**

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Key Takeaways



Strong market trends around patient specific solutions and transformative delivery models



Industry leading expertise in healthcare – from technology portfolio to applications and regulatory expertise



Robust pipeline of opportunities provides long-term tailwind for growth

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Investor Day

Industrial Solutions

Reji Puthenveetil

Executive Vice President

Industrial Solutions

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Macro Trends Drive Growth Opportunity for Additive

- Connected Factory
- Productivity
- Deglobalization
- Cost Management
- Speed to Market
- Sustainable Solutions



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Attractive Addressable Markets with High Growth Potential

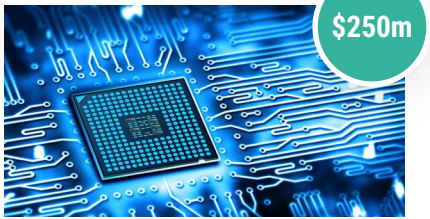
Serviceable Addressable Market [1]



Aerospace & Defense



Transportation & Motor Sports



Semiconductor



Consumer Technology



Energy



Jewelry



Academic & Research



Service Bureaus

$3B Production Target Markets are Growing Double Digit

1. Per Company estimates

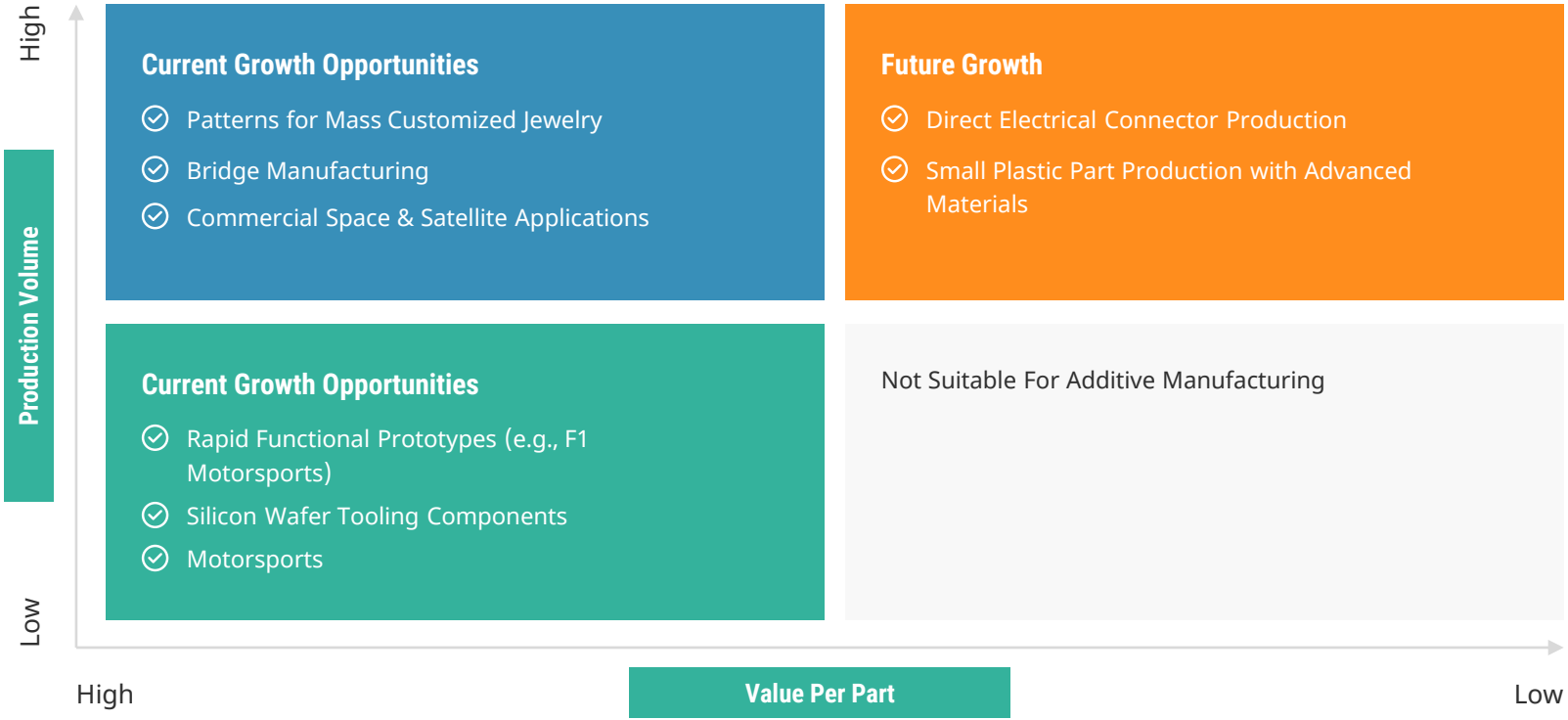
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Vertical & Application Focus to Build Customer Capabilities

	Speed to Market & Efficient Supply Chain		Design Freedom & Innovation				Intelligent Manufacturing	
	Functional Prototype & Low Volume	Mass Customization	Advanced Material for AM	Optimized Energy & Fluid Flow	Part Consolidation	Strength & Light Weighting	Automation	End to End Solution
 Aerospace & Defense	●		●	●	●	●	●	●
 Transportation & Motor Sports	●		●	●		●	●	●
 Semiconductor	●		●	●	●	●	●	
 Energy	●		●	●	●	●		
 Connectors	●	●	●				●	●

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Growth Drivers: Improved Material Properties, Application Development and System Productivity



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Semiconductor

Business Need

Wilting Components B.V., a Tier I supplier to semiconductor capital equipment OEMs, needed optimized part performance and improved productivity by using additive

Additive Solution

- Application Engineering Consultation
- Production support via 3D Systems' Customer Innovation Center
- Metal Additive Capabilities: The DMP Flex 350 integrated metal AM solution with 3DXpert and a suite of LaserForm materials
- Technology Transfer

- **Production capability**
  Achieved 24/7 uptime with DMP Flex 350, while increasing capacity, flexibility, and reducing inventory
- **Performance**
  50% lighter parts and 90% reduction in flow disturbance forces = reduced system vibration and improved accuracy
- **Part reliability**
  Replace multi-part assemblies with monolithic parts for increased reliability, improved yield and reduced labor costs.
- **Design flexibility**
  Optimally design and rapidly iterate complex parts
- **Accelerated time-to-market**
  through expert-led technology transfer

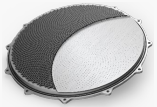
Manifold Fluid Flow



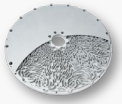
HX Mixer



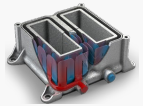
Shower Head



Wafer Table



Linear Motor Cooler



Structural Optimization



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Semiconductor Technology Transfer to Wilting (Tier I Supplier)

Explore → **Innovate** → **Develop** → **Validate** → **Produce** → **Scale**

OEM — **Tier I**

Determine opportunities for Additive to improve performance.

Develop and optimize applications.

Example:

- Reduce manifold disturbance forces up to 90%
- Part consolidation to reduce weight 50%

3D Systems produce prototypes and pre-production for Wilting post machining, test, and assembly for OEM.

3D Systems validates AM processes and produces & Wilting validates assembly with the OEM.

Bridge production by 3D Systems as production begins to transfer to Wilting

Wilting running AM at 100% production volume. 3D Systems provides supply chain capacity and continuity, with replicated processes and equipment.



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Motorsports

Business Need

- Advanced Materials & Superior Strength-to-Weight
- Productive Platforms for Improved Economics
- Rapid Advancements for Competitive Edge

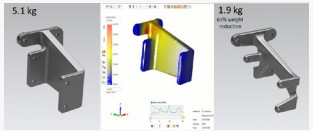
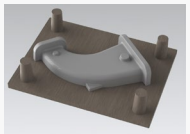
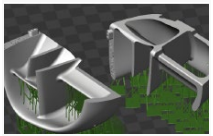
Additive Solution

- Metal Structural Components
- Performance Wind-Tunnel
- Air & Fluid Handling
- Jigs & Fixtures



"The Supercar Gearbox that is set to change the automotive industry. Incredibly light and hardwearing, breaking all the rules as to how a gearbox can be designed and made."

Rodin Cars

Software-Optimized Metal Components	Accelerated Casting Production	High Performance & Productive Aerodynamics	Optimized Fluid Management & Cooling
			

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Jewelry

Business Need

Based in Vicenza, Italy, IMO is a reference supplier for some of the most notable jewelry brands in the world. The company performs the complete jewelry manufacturing process and requires a complete production solution with 100% wax casting

Additive Solution

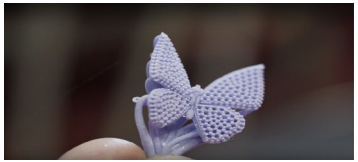
- A production solution for Jewelry by the market leader in 100% wax casting
- ProJet MJP 2500W prints consistent, high-resolution jewelry patterns
- VisiJet 100% wax materials
- 3D Sprint design software



- **Production capability** with batches of 100% wax jewelry patterns at factory scale with 24/7 operation.
- **Lead time.** 60-100 wax patterns in just 4 hours to deliver cost-effective, high-quality results with high throughput
- **Design freedom** “3D printing allows us to create objects that would be impossible to obtain with traditional systems…”
- **100% success rate.** Casting reliability of pure wax patterns featuring a clean burnout with no ash content.
- **Reduced cost.** Reduced finishing labor and polishing with dissolvable supports, minimized loss of precious metals.











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Current Growth

Space Propulsion

Business Need

- Complex designs
- Improved supply chain
- Reduced weight

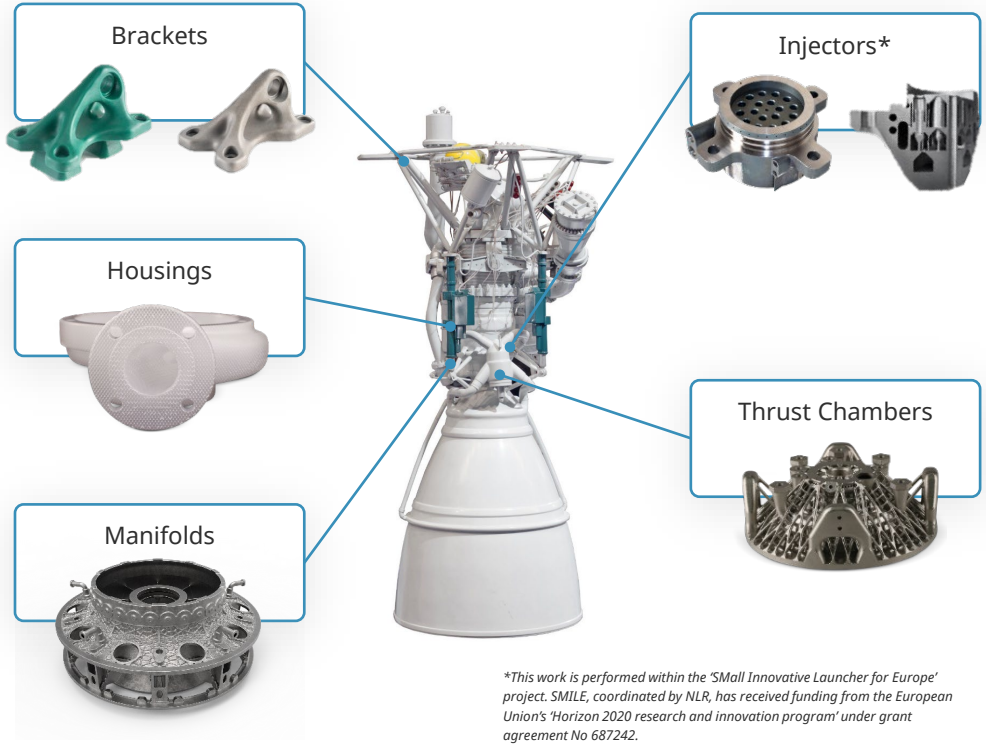
Additive Solution

Additive Casting Workflows
Direct Metal Printing (DMP)

- Exceptional design flexibility
- Reduced weight
- High levels of unitization
- Lower total part count
- Fewer vendors
- Less assembly
- Faster time-to-part

Polymers – Quickcast / Wax

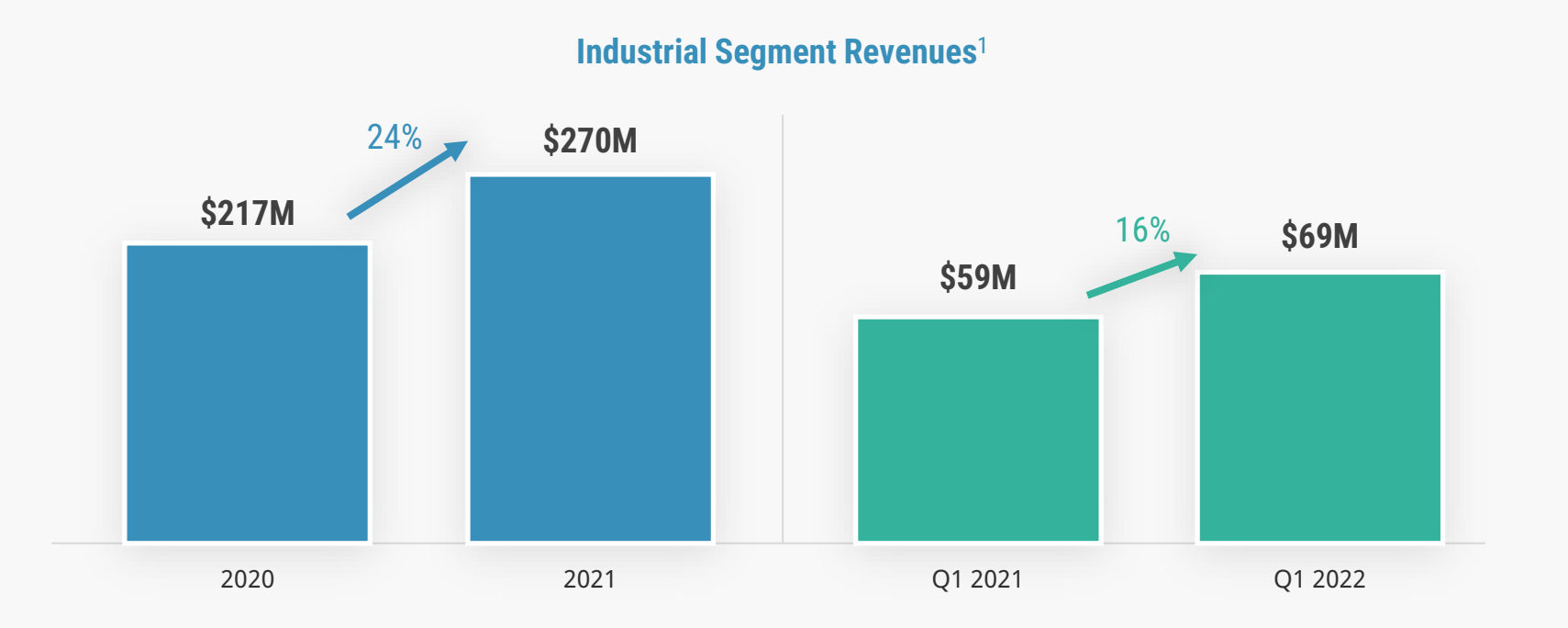
Metals - DMP



**This work is performed within the 'SMall Innovative Launcher for Europe' project. SMILE, coordinated by NLR, has received funding from the European Union's 'Horizon 2020 research and innovation program' under grant agreement No 687242.*

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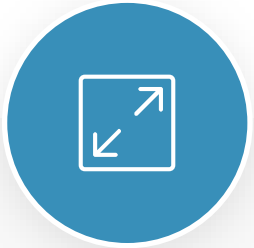
Proven Ability to Drive Growth



1. Adjusted for divestitures; percentages may not foot due to rounding

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Key Takeaways



Large & expanding market opportunities generated by advances in material properties and system productivity



Deep application expertise within key verticals provides platform for ongoing growth



Full solution of application, material, software, and systems enables deep customer engagement and drives recurring revenue

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Investor Day

Oqton

Ben Schrauwen

Senior Vice President

Software

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Intro

Former Professor in Machine Learning, previously managing advanced manufacturing at Autodesk, co-founder and CEO of Oqton

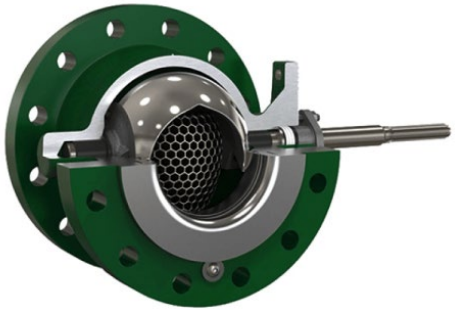


$6T manufacturing industry is being disrupted

- Smaller batch sizes, shorter time to market
- Waterfall model with disconnected software silos
- Complex processes and shift in labor force causing skill gap
- Deglobalization and sustainability

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Software Enables Accelerating the Adoption of Additive



EMERSON





Software can reduce cost

10x

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Software Enables Accelerating the Adoption of Additive

Discovery

Business Case

- Assess which use cases can be benefit from additive, estimating cost and feasibility

Process

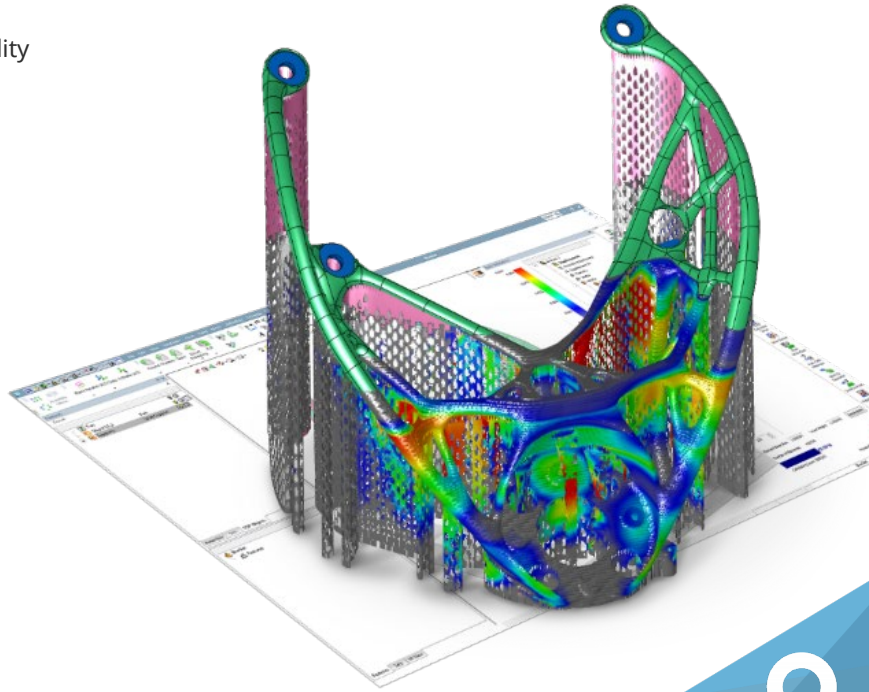
- Control machines from software in ways that enables more use cases: reducing support structures, increasing accuracy, reducing failures

DfAM

- Design rich geometries that benefit strongly from the additive process: lattices, implicit surfaces, generative design, …

Simulate

- Predict how parts will deform or crack and optimally orient and support them, without doing test prints



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Software Enables Accelerating the Adoption of Additive

Productivity

Integrate

- Integrates several internal business systems with the production environment, enabling a singular view, a real digital thread

Automate

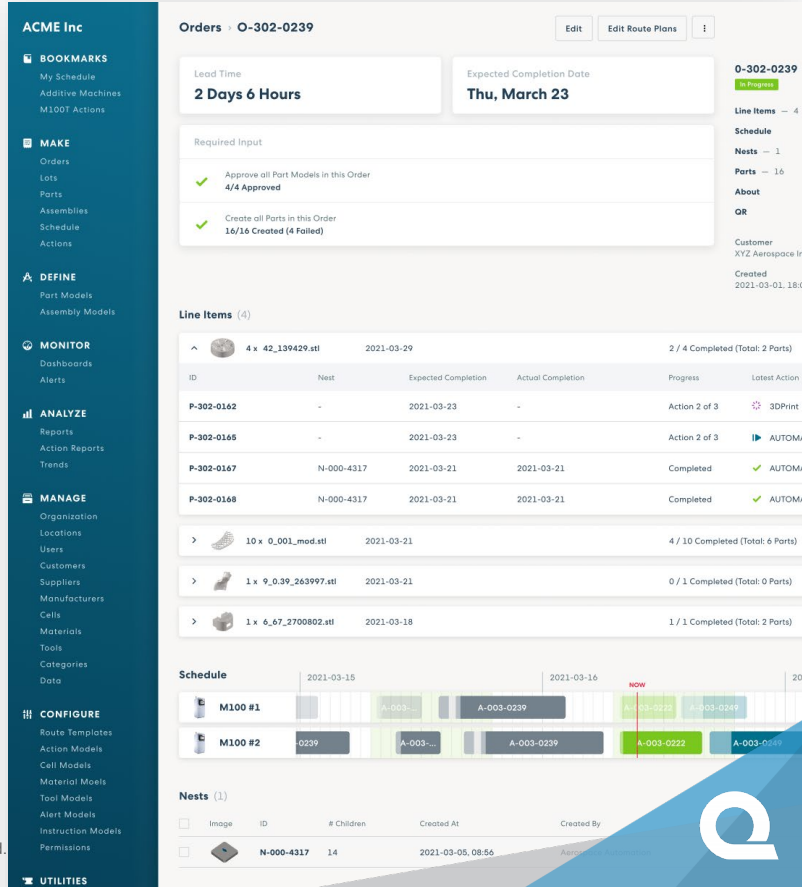
- Leverage AI to automate repetitive engineering tasks: quoting, build preparation, nesting, scheduling, …

End-to-end

- Manage the complete process from order intake to all steps in production (printing, post processing, machining)

Traceability

- Track all aspects of production, powders, build plates, test specimen, training levels, maintenance, …



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Software Enables Accelerating the Adoption of Additive

Quality

Process

- Monitor the additive process using visual, thermal or melt-pool techniques and analyse in context

Material

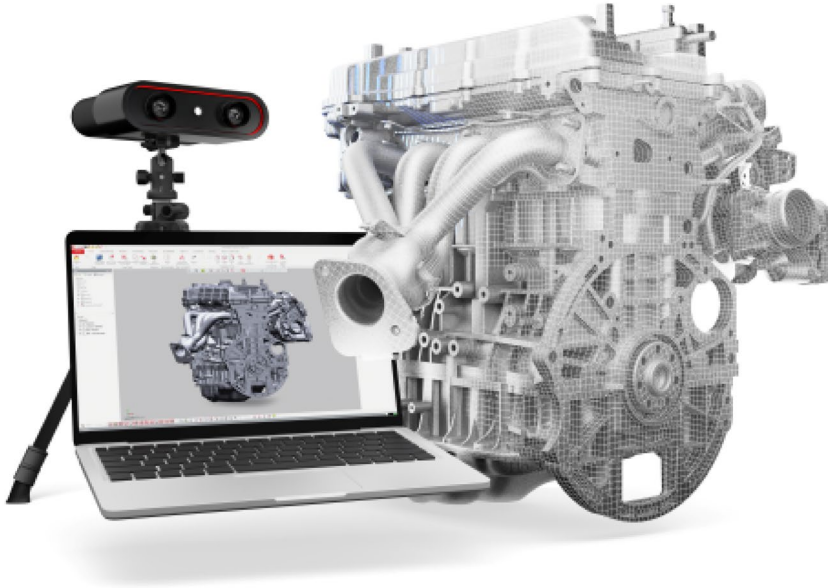
- CT scanned quality control can be used to non-destructively asses part quality and be be visualized in context

Geometrical

- Rich portfolio of scan based quality control using Geomagic portfolio which is integrated into the MES

Machine

- Continually observe machine sensors and detect anomalies or drift to guarantee continued quality and perform predictive maintenance



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Manufacturing OS—Accelerating Intelligent Manufacturing



Design Prepare Simulate Schedule Monitor Analyze Trace Finish Inspect Certify

Powered by AI

Focus through business verticals

Dental

- Automated 3D printing and CNC programming
- Crown and bridge, dentures, clear aligner

Medical

- Full Part 11 compliant traceability
- Implants, surgical guides, instruments

(Internal) Service Bureau

- Full order tracking, MES, integrated preparation
- All types of equipment

Aerospace / Defense

- Full traceability, ITAR compliant



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Open Ecosystem

- Customer reality is a heterogeneous environment
- Oqton is an open and neutral platform
- Deeply integrates with all major 3D printer vendor hardware and software
- Automates complete process: post-processing, heat treatment, machining, wire EDM, surface treatment, dying, …
- Several partners bundle and resell Oqton



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Acquisition:
Neutral, Accelerate, Expand

Neutral

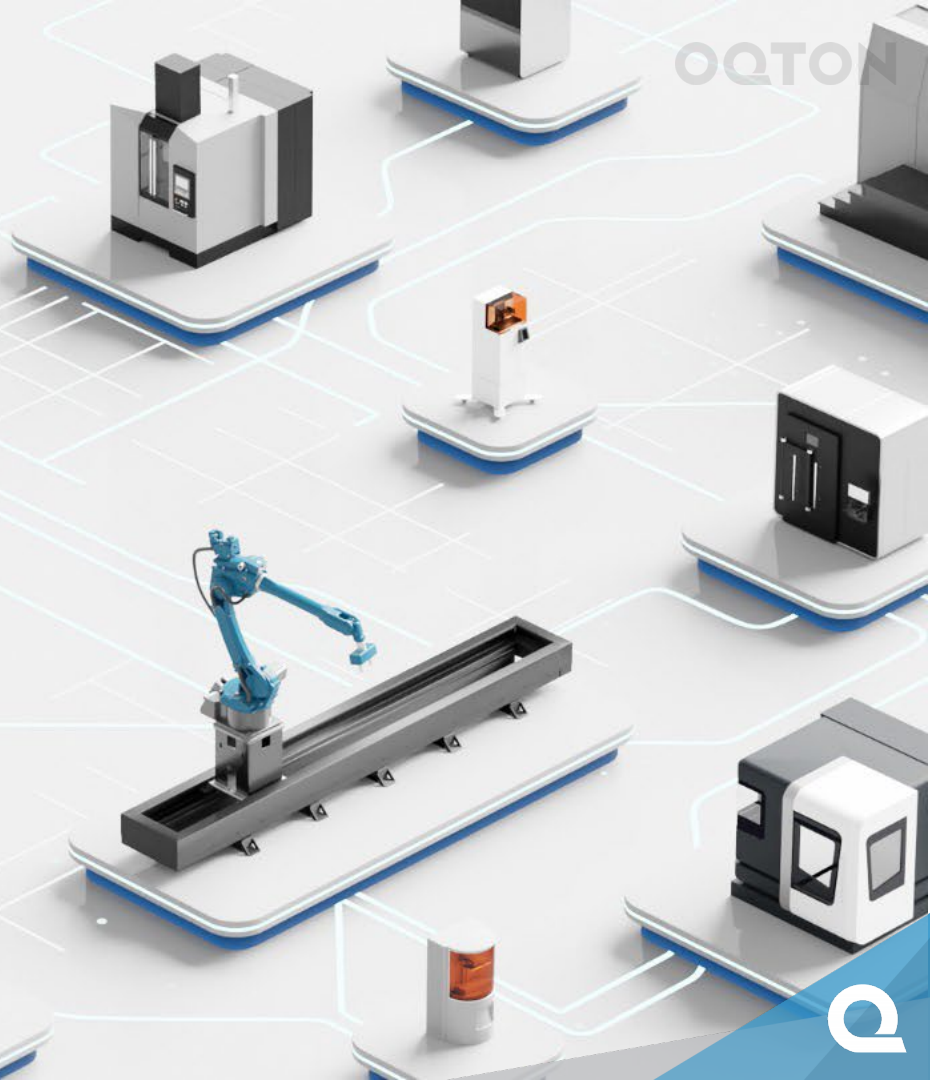
- Separate business unit for software, data firewall to guarantee neutrality

Accelerate

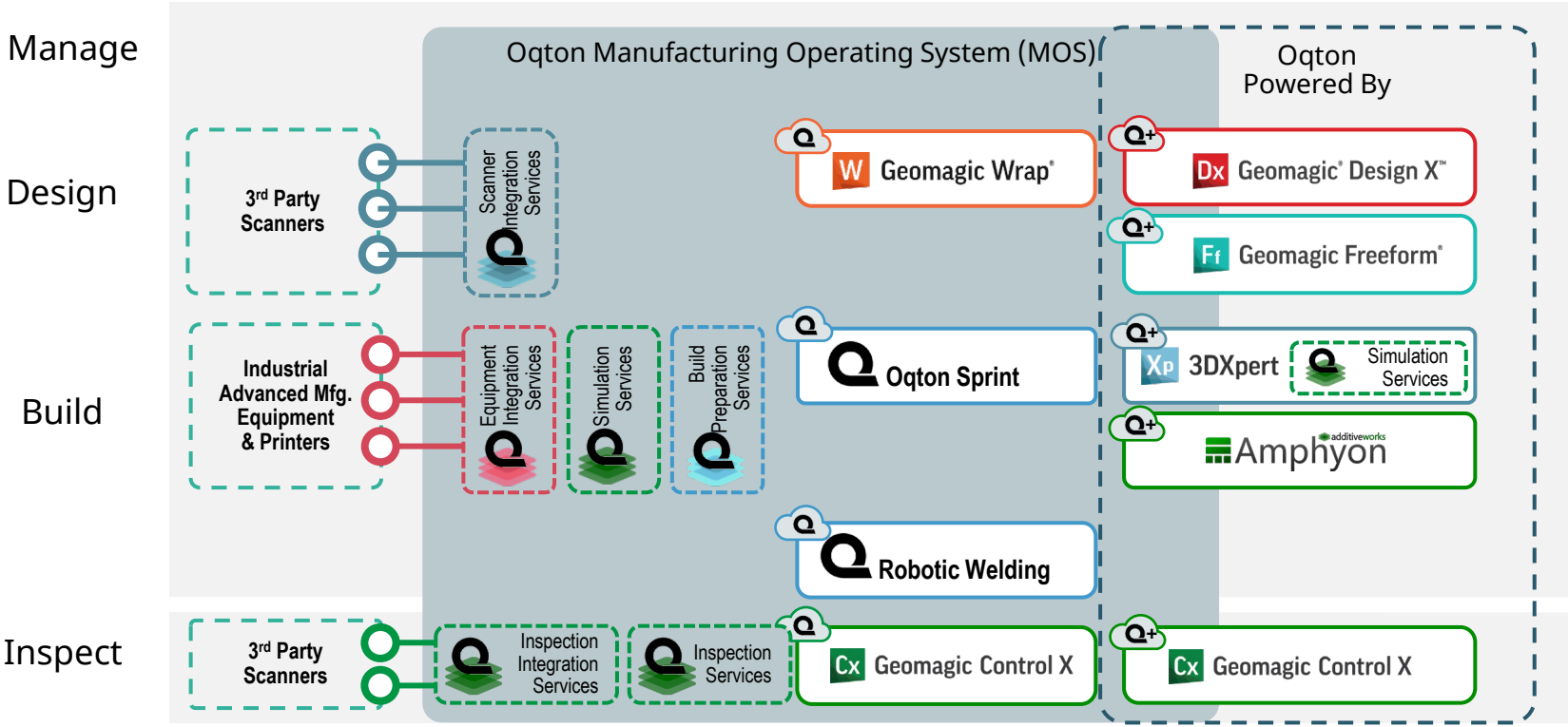
- Big focus to grow to significant software business

Expand

- Added all 3D Systems software asset: 3DXPert, 3DSprint, Geomagic



Unified Software Strategy



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Investor Day

Engineering & Application Innovation

David Leigh

Executive Vice President, Chief Technology Officer
Additive Manufacturing

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Our Technology Evolution

3D Systems technology portfolio is the **product of years of technology development efforts plus multiple acquisitions**

1987
Launch of SLA-1 Printer

1996
Launch of MJP Platform

2001
Acquisition of DTM & SLS Platform

2012
Acquisition of Z-Corp to launch CJP Platform

2014
Acquisition of Layerwise to launch DMP Platform

2016
Launch of Figure 4, new DLP Technology

1980s | 1990s | 2000s | 2010s | Today



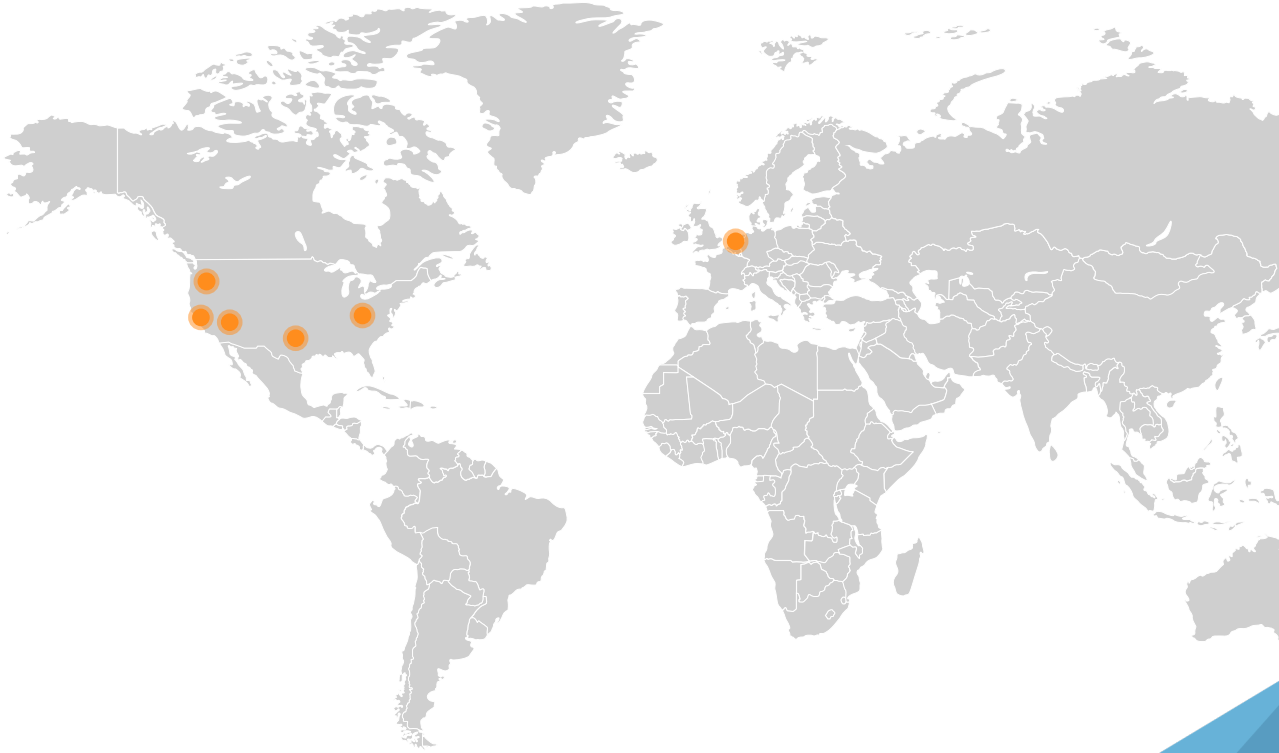




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Overview of Additive Manufacturing Application Innovation and Engineering

- 300+ people in 6 primary locations
- Centers of excellence in materials, jetting, photo polymers, laser sintering and metals
- Centers in Littleton, CO; Rock Hill, SC; and Leuven, Belgium supporting advanced application development
- 30+ in market printers supported



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Solutions to Address a Range of Additive Needs

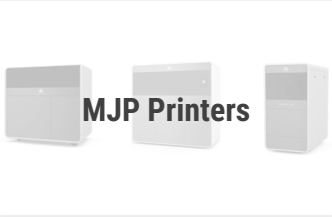
- Robust and complete line of additive manufacturing printers across six platforms
- 130+ materials for a range of applications
- Complete software portfolio including firmware and additional value-added software packages
- Focused on maintaining market leadership through continuous and aggressive innovation

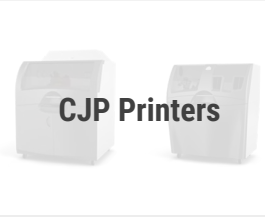












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Solutions to Address a Range of Additive Needs

- Robust and complete line of additive manufacturing printers across six platforms
- 130+ materials for a range of applications
- Complete software portfolio including firmware and additional value-added software packages
- Focused on maintaining market leadership through continuous and aggressive innovation



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	2021	2022	2023
SLA	SLA 750	SLA 750 Dual	SLA Small Frame Refresh
SLS	SLS 380		SLS Performance Refresh
DMP	DMP Flex 350 Dual	DMP 500 Flex	
Figure 4	Fig4 Materials	Fig4 Expansion (Bio and Industrial Applications)	
MJP		MJP Stabilization	Enhanced MJP Project
CJP			CJP Reboot
Extrusion			











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Maturing a Legacy Development Process

Independently Developed Platforms → No Reuse of Common Subsystems

Monolithic Development Process → No Use of Iterative Development Cadence

- Expensive to Engineer
- Slow
- Poor Application Focus
- No Leverage of Parts Costs Across Platforms
- Component EOL = Re-engineering VS Innovation

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Leveraging a Modern Approach to Engineering

Build to Deliver



- Tightly aligned engineering and supply chain
- Modular development process to take advantage of commonality

Manage for Speed



- Competitive advantage through increased pace of development
- Agile development process and increased common components

Application and Customer First



- Embedded product management to tie segment needs, application development and engineering
- Consistent user experience
- Application engineering driving feedback

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1 Build to Deliver

Products Architected For Simplification and Standardization

- Common components and reuse
- Lower cost with faster feature development
- Rapid release cycles
- Improved quality
- Leverage partners for commodity development
- Tighter supply chain coupling and fewer part SKUs: less parts stock, lower parts costs and more consistent sourcing



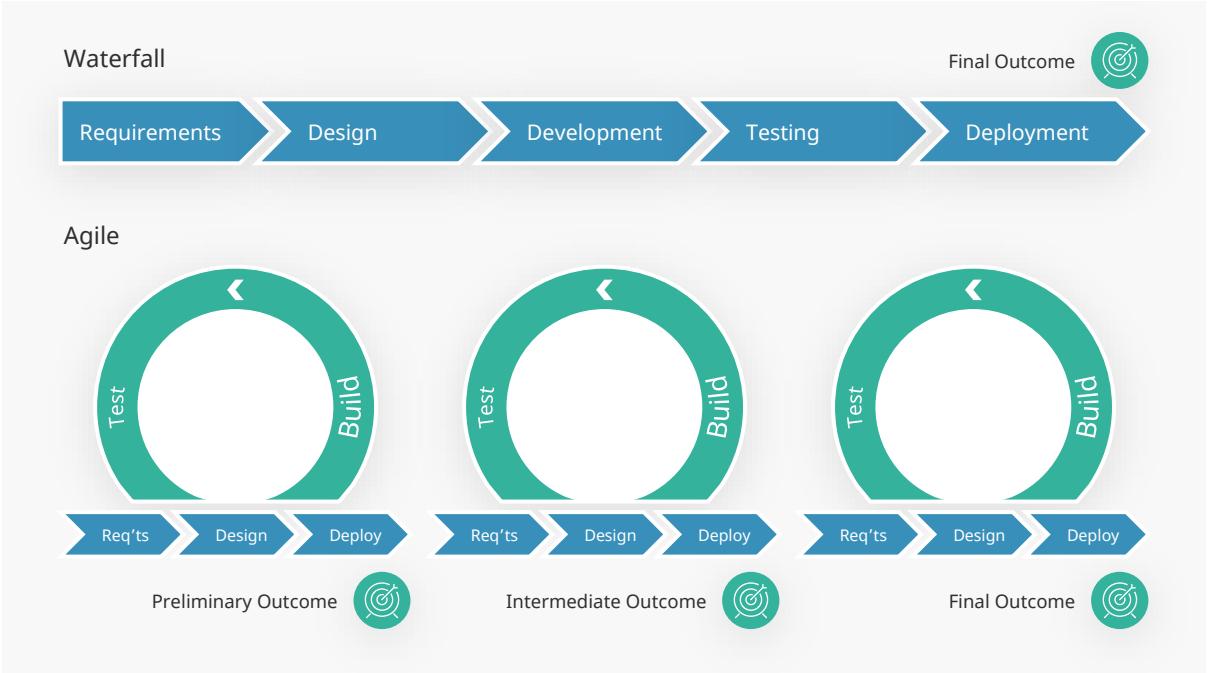
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2 Manage for Speed

Refreshed portfolio every 12 – 18 months with backward compatibility in the field

Outcomes

- Launch new-exciting concepts at trade shows
- Regular Release Schedule
- Quick iterations – customer focused
- Multiple offerings
- Focus on profit opportunities
- Strive for dominant design

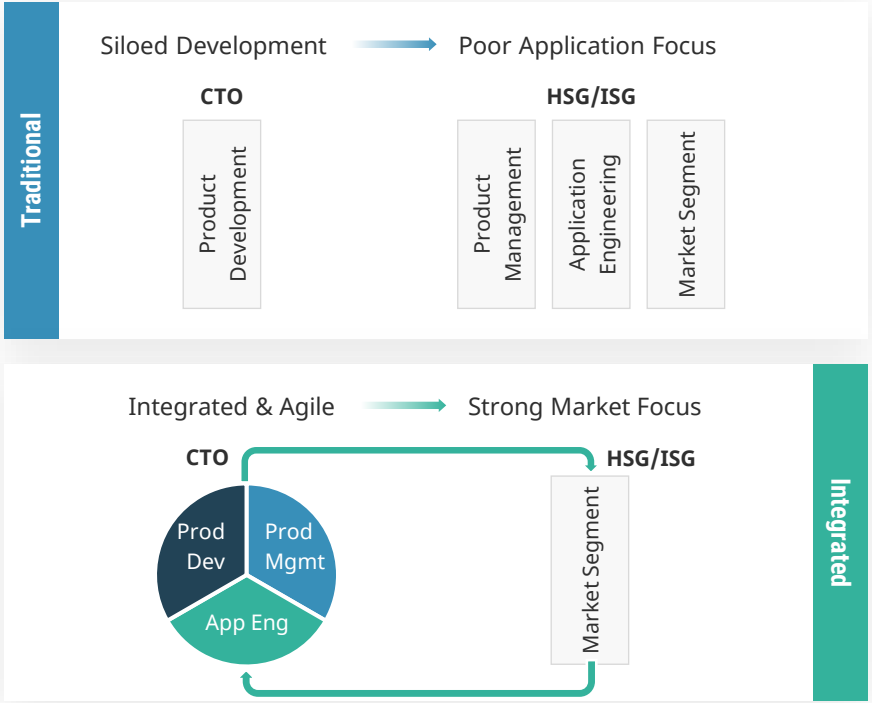


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3 Application and Customer First

Organizational Structure Enables a Modern Development Process

- Integrated teams enable agile development
- Iterative
- Realtime application and customer insights
- Separate teams / partners for subsystems
- Tight linkage with market leaders
- Lower risk of “missing the mark” with new product introductions



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Materials

Translating successful products from Figure 4 to SLA



Figure 4 PRO-BLK 10

Production-grade, rigid material for production parts



Accura AMX Rigid Black

Production-grade resin featuring long-term environmental stability



Figure A Tough 60C White

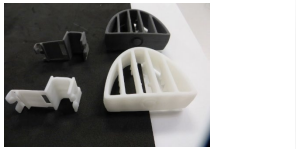
White plastic for long-term use parts with a good combination of impact strength, elongation, and tensile strength



Accura AMX Durable Natural

Production-grade resin featuring long-term environmental stability

New sintered materials



Duraform PAx

RAPID Announcement



Certified M789 (A)

Cobalt free, high strength tool steel with excellent corrosion resistance



Certified Scalmalloy (A)

High strength aluminum with excellent corrosion resistance

New flame retardant photopolymer



Figure 4 High Temp 150°C FR Black

UL94 V0 rated flame-retardant black plastic with >150C heat deflection temperature

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Application Innovation Group

Innovation and Expertise to Fast Track ROI

Function

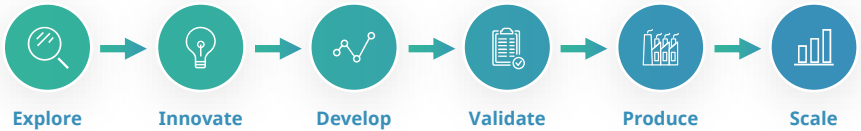
An internal team of experts that accelerate the development of advanced applications and innovative manufacturing solutions.

Key Advantage

We give our customers a competitive edge in accelerating the adoption of additive manufacturing and helping them scale towards production.

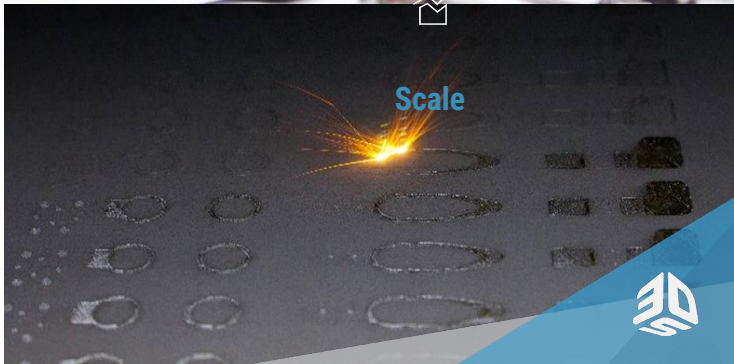
Unique Position

We not only supply systems, materials, software, and service, we are users of the technology as well.









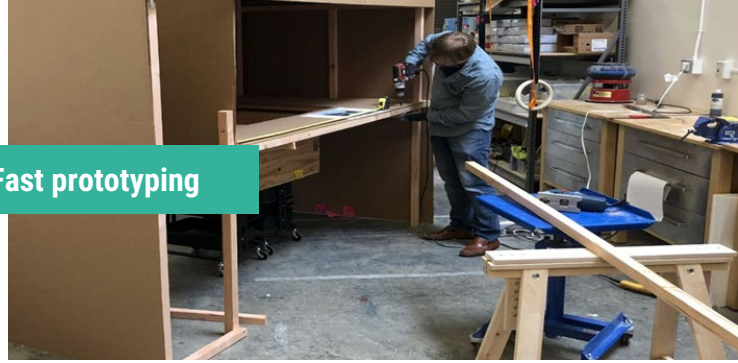
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Customer Input & Feedback

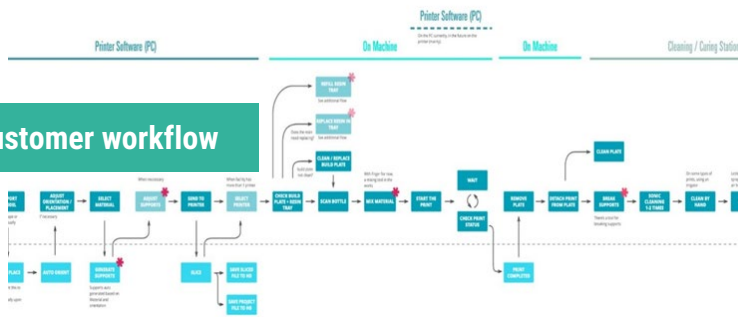
Validate assumptions as early as possible

Iterate

- Identify market opportunity
- Prospective customers
- Journey map of existing process
- Journey map of new/aspirational process
- Lean prototype (beta ≤1)
- Test
- Spec/MRD
- Develop & Test (multiple cycles)
- Launch



Fast prototyping



Customer workflow



Customer visit

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SLA 750 Post Process Operator Experience









Print → Transport → Clean → Dry & Cure

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Key Takeaways



Broad technology portfolio across hardware, software and materials



Enhanced development processes accelerates speed of innovation



Move towards modular components provides efficiency and product cost improvements

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Investor Day

Translation to Financial Performance

Wayne Pensky

Interim Chief Financial Officer

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Strong Progress Towards Long Term Goals in 2021

Divestitures created a focused business positioned for success

Revenue outperformed 2020 and pre-pandemic 2019

Gross margin improvements reflects outstanding execution of sales and supply chain

Healthy EBITDA reflects revenue growth combined with 2020 business restructuring

$544M
2021 FY Revenue [1]

32% / 17%
Revenue growth versus 2020 and 2019 [1]

43.0%
2021 FY Gross Margin [1]

$56M
2021 Adjusted-EBITDA [1]

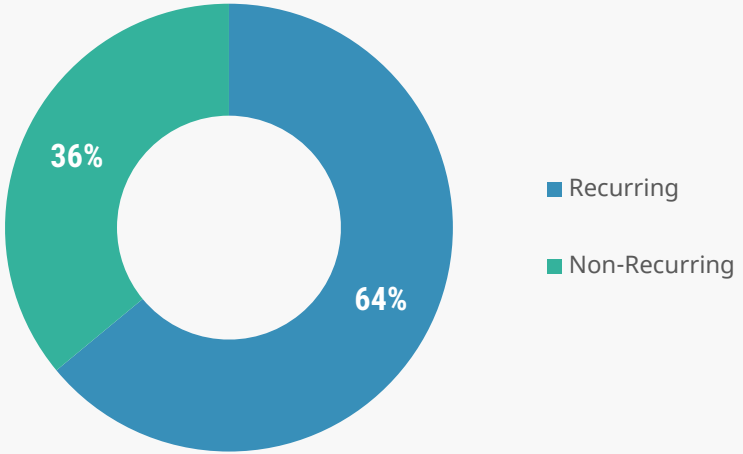
$66M
Adjusted EBITDA Improvement vs 2020 [1]

1. Adjusted for divestitures and Non-GAAP

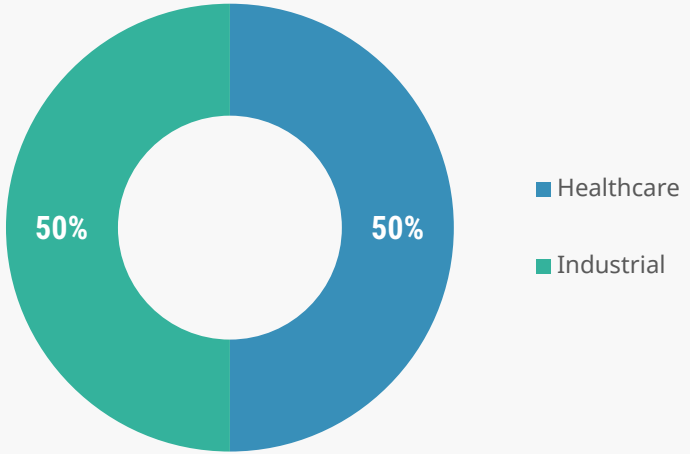
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Balanced and Resilient Revenue Profile

2021 Recurring Revenue[1]



2021 Segment Revenue[1]



~2/3rd of revenue is recurring, primarily driven by materials, services and software businesses

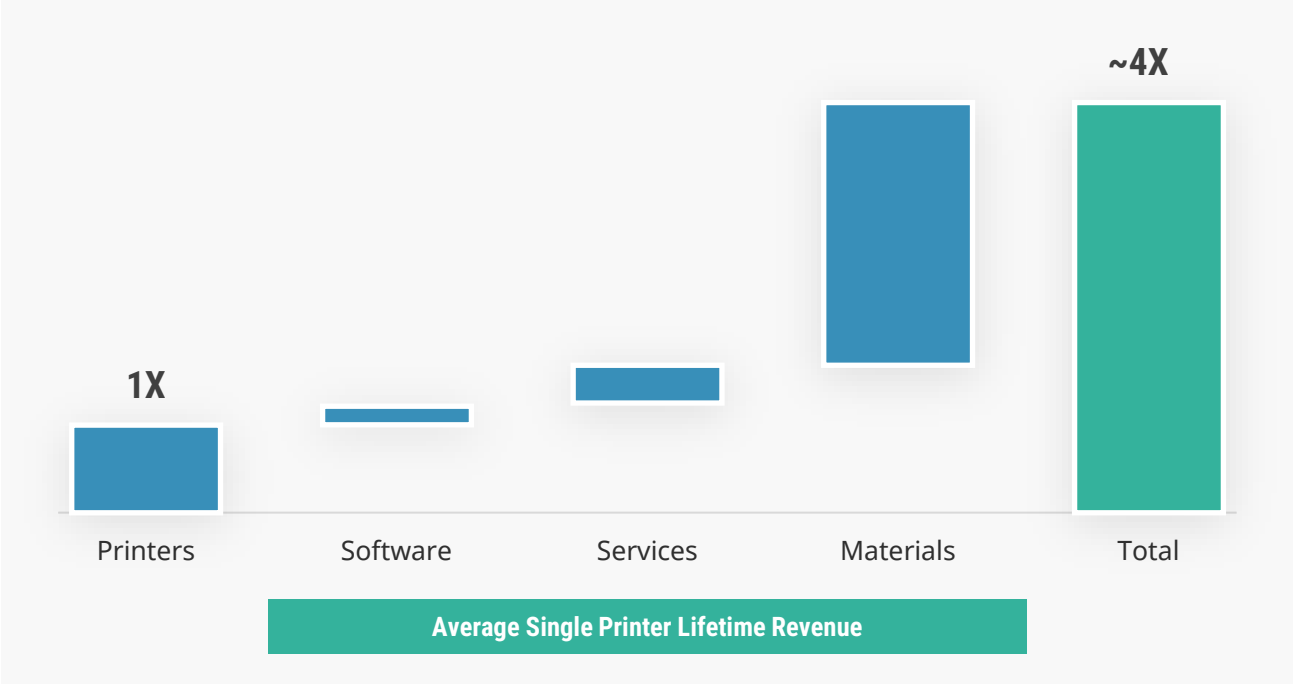
1. Adjusted for divestitures

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Recurring Revenue Business Model Creates Value

Multiple opportunities to drive lifetime revenue

- Production applications
- Software
- Enhanced services
- Materials



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2022 Investments Drive Multiple Growth Opportunities

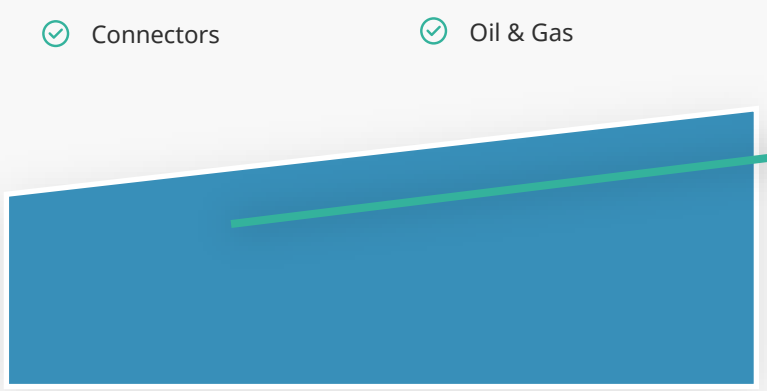
Driving Double Digit Revenue Growth

- Relentless AM application focus in high value markets
- Maintain and enhance broadest technology portfolio
  - Product refreshes position 3D Systems technology as the best balance of cost and functionality
  - Investment in Materials enables new and innovative applications
  - Software is a growth driver – with leading capabilities for the entire additive manufacturing industry
- Scale to support customer needs from inception to fleet production—
  we are the market leader in enabling customers to move production to AM
- Regenerative medicine significantly advances our core technology and enables disruptive applications

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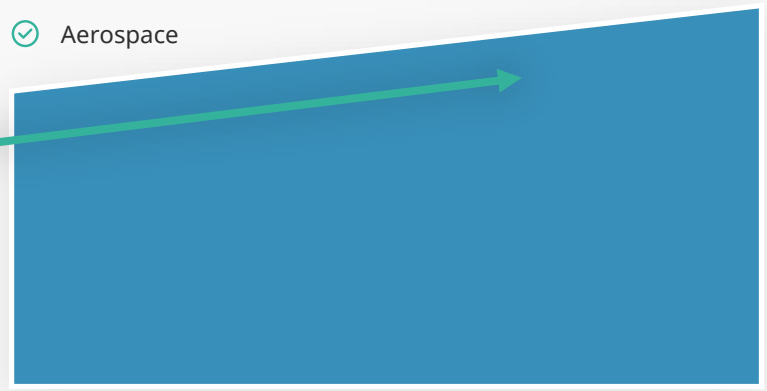
Application Innovation Fuels Long-Term Growth

- Electric Vehicles
- Organ Printing
- Breast Reconstruction
- Connectors
- Heat Exchangers
- Drug Development
- Semiconductors
- Oil & Gas



Emerging Applications

- Orthopedics
- Jewelry
- Dental
- Aerospace
- Point-of-Care
- Craniomaxillofacial
- Personalized Medicine
- Motorsports



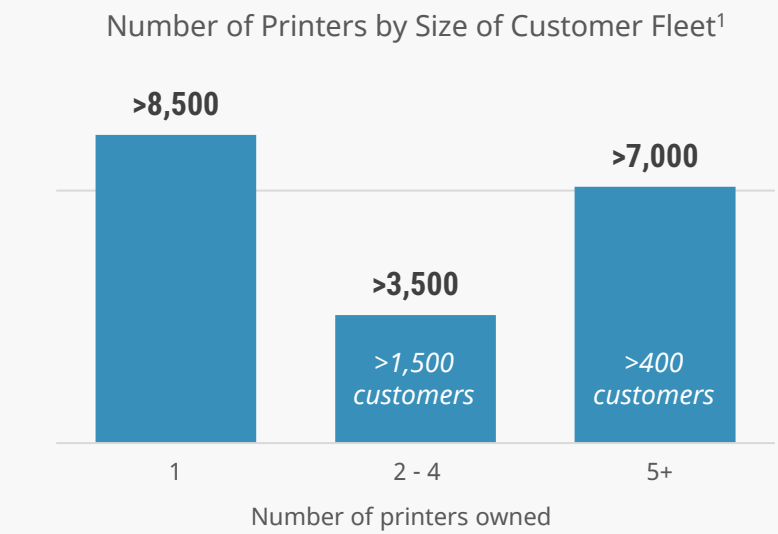
Established Markets

1,000,000+ Parts per Day

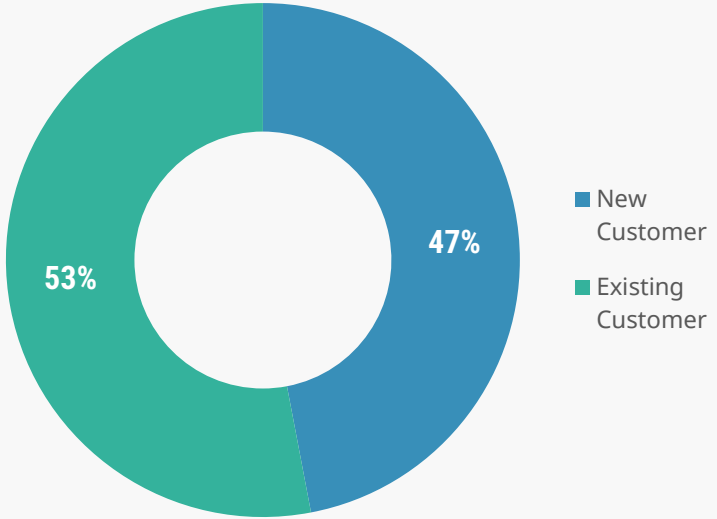
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Scale Fuels Growth

Distribution of Customer Fleet Size



Distribution of 2021 Printer Sales



11% 5-YR CAGR of Fleet Customers [2]

1. Based upon supported printers under service contracts 2. Defined as accounts with three or more printers

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Long-Term Financial Targets

Growth Drivers

- Expanding market opportunities drive printer sales
- Growth of software to manage end-to-end: design, print and production management
- Materials / services consumption

Margin Improvements Driven By

- Printer standardization to reduce COGS
- Mix shift to high margin software offerings
- Scale leverage from supply chain, R&D and SG&A

2027 Targets	
Revenue	$1 Billion
Gross Margin	50%
R&D	10%
Non-GAAP SG&A[1]	20%
Adjusted EBITDA[1,2]	20%

Percentages of Revenue

Note: Business model target excludes contribution from regenerative medicine initiatives

1. See “Presentation of Information” in Appendix for a description of non-GAAP SG&A and Adjusted EBITDA
2. Depreciation is expected to be 3-4% of revenue. The addback of depreciation is not specifically included in the adjusted EBITDA target of 20% and provides contingency to meet the target.

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Why 3D Systems?



Relentless AM application focus in high value markets



Focused business + strong balance sheet to support growth



Demonstrated double-digit revenue growth



Targeting $1B revenue in 5 years



Expanding margins through scale, mix, refreshed product portfolio

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Q&A Panel

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Thank You

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3D SYSTEMS

Appendix

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Presentation of Information

3D Systems reports its financial results in accordance with GAAP. Management also reviews and reports certain non-GAAP measures, including: non-GAAP revenue, non-GAAP Gross profit, non-GAAP Gross profit margin, non-GAAP SG&A, adjusted EBITDA and adjusted EBITDA Margin. Non-GAAP revenue is defined in this presentation as reported revenue less revenue from businesses divested in 2021. These non-GAAP measures exclude certain special items that management does not view as part of 3D Systems' underlying results as they may be highly variable, may be unusual or infrequent, are difficult to predict and can distort underlying business trends and results. Management believes that the non-GAAP measures provide useful additional insight into underlying business trends and results and provide a more meaningful comparison of period-over-period results. Additionally, management uses the non-GAAP measures for planning, forecasting and evaluating business and financial performance, including allocating resources and evaluating results relative to employee compensation targets. 3D Systems' non-GAAP measures are not calculated in accordance with or as required by GAAP and may not be calculated the same as similarly titled measures used by other companies. These non-GAAP measures should thus be considered as supplemental in nature and not considered in isolation or as a substitute for the related financial information prepared in accordance with GAAP.

Adjusted EBITDA, defined as net income, plus income tax (provision)/benefit, interest and other income/(expense), net, stock-based compensation expense, amortization of intangibles, depreciation expense and other non-recurring and/or non-cash items all as described above, is used by management to evaluate performance and helps measure financial performance period-over-period.

3D Systems does not provide forward-looking guidance for certain measures on a GAAP basis. The company is unable to provide a quantitative reconciliation of forward-looking non-GAAP SG&A and Adjusted EBITDA to the most directly comparable forward-looking GAAP measures without unreasonable effort because certain items, including legal, acquisition expenses, stock-compensation expense, intangible amortization expense, restructuring expenses, and goodwill impairment, are difficult to predict and estimate. These items are inherently uncertain and depend on various factors, many of which are beyond the company's control, and as such, any associated estimate and its impact on GAAP performance could vary materially.

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Unaudited Reconciliation of Prior Years Revenue Excluding Divestitures, 2019-2021 (non-GAAP)

(in millions)	2019	2020	2021
Revenue			
Healthcare	$ 244.5	$ 246.4	$ 306.2
Industrial	391.9	310.8	309.4
Total Revenue	636.3	557.2	615.6
Revenue From Divestitures:			
Healthcare	53.2	50.5	31.8
Industrial	118.1	94.1	39.9
Total Revenue	171.1	144.6	71.6
Total Revenue (Excl. Divest.):			
Healthcare	191.3	195.9	274.4
Industrial	273.8	216.7	269.5
Total Revenue (Excl. Divest.):	**$ 465.1**	**$ 412.6**	**$ 543.9**

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Unaudited Reconciliations of GAAP to Non-GAAP measures

For the year ended December 31, 2020

(in millions, except per share data)	2020							2020
	GAAP	Amortization, stock-based compensation & other	Legal, acquisition and divestiture - related (1)	Cost optimization plan	Impairment of cost-method investments	Product end of life adjustment	Goodwill impairment	Non-GAAP
Revenue	$ 557.2	$ -	$ -	$ -	$ -	$ -	$ -	$ 557.2
Gross Profit	223.4	0.4	0.4	2.2	-	10.9	-	237.2
Gross Profit Margin	40.1%							42.6%
Operating expenses	342.3	(33.0)	(4.1)	(20.0)	-	-	(48.3)	236.9
Operating income (loss)	(119.0)	33.4	4.5	22.3	-	10.9	48.3	0.3
Interest and other income (expense), net	(24.4)	1.0	14.1	-	2.2	-	-	(7.2)
Net income (loss)	$ (149.6)	$ 34.4	$ 18.6	$ 22.3	$ 2.2	$ 10.9	$ 48.3	$ (13.1)
Net (loss) EPS - basic	$ (1.3)	$ 0.3	$ 0.2	$ 0.2	$ 0.0	$ 0.1	$ 0.4	$ (0.1)
Net (loss) EPS - diluted	$ (1.3)	$ 0.3	$ 0.2	$ 0.2	$ 0.0	$ 0.1	$ 0.4	$ (0.1)
Weighted Average Shares - basic	117.6							117.6
Weighted Average Shares - diluted	117.6							117.6

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Unaudited Reconciliations of GAAP to Non-GAAP measures

For the year ended December 31, 2021

(in millions, except per share data)	2021					2021
	GAAP	Amortization, stock-based compensation & other	Legal, acquisition and divestiture - related(2)	Cost optimization plan	Product end of life adjustment	Non-GAAP
Revenue	$ 615.6	$ -	$ -	$ -	$ -	$ 615.6
Gross Profit	263.8	0.5	-	-	0.2	264.5
Gross Profit Margin	42.8%					43.0%
Operating expenses	296.8	(64.4)	(16.3)	(1.4)	-	214.7
Operating income (loss)	(33.1)	64.9	16.3	1.5	0.2	49.8
Interest and other income (expense), net	352.6	-	(353.8)	-	-	(1.3)
Net income (loss)	$ 322.1	$ 64.9	$ (331.9)	$ 1.5	$ 0.2	$ 56.6
Net income EPS - basic	$ 2.6	$ 0.5	$ (2.7)	$ 0.0	$ -	$ 0.5
Net income EPS - diluted	$ 2.5	$ 0.5	$ (2.6)	$ 0.0	$ -	$ 0.4
Weighted Average Shares - basic	122.9					122.9
Weighted Average Shares - diluted	126.3					126.3

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Non-GAAP Operating Income to Adjusted EBITDA Reconciliation

For the years ending December 31, 2021 and 2020

	2021	2020
Revenue	$ 615.60	$ 557.20
Non-GAAP Operating Income	49.8	0.3
Depreciation	24.3	28.4
Adjusted EBITDA	$ 74.1	$ 28.7
Adjusted EBITDA Margin	12.0%	5.2%

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Reconciliation of GAAP Operating Income to Adjusted EBITDA excluding Divestitures

For the years ending December 31, 2021 and 2020

	2020	2021
GAAP Operating Income (Loss)	$ (119.0)	$ (33.1)
plus: Adjustments from GAAP to Non-GAAP	119.4	82.8
less: Operating Income from Divestitures	(34.6)	(16.2)
Non-GAAP Operating Income excluding Divestititures	**$ (34.2)**	**$ 33.5**
Plus: Depreciation excluding divestitures	23.9	22.6
Adjusted EBITDA excluding divestitures	**$ (10.3)**	**$ 56.1**

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