3D SYSTEMS

STRATEGY AND SOLUTIONS TO MAKE 3D PRODUCTION REAL

STACEY WITTEN

VICE PRESIDENT, INVESTOR RELATIONS, 3D SYSTEMS

FORWARD LOOKING STATEMENTS

This presentation contains certain statements 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 include statements concerning plans, objectives, goals, strategies, expectations, intentions, projections, developments, future events, performance or products, underlying assumptions, and other statements which are other than statements of historical facts. In some cases, you can identify forward-looking statements by terms such as “believes,” “beliefs,” "may," "will," "should," expects," "intends," "plans," "anticipates," "estimates," "predicts," "projects," "potential," "continue," and other similar terminology or the negative of these terms. From time to time, we may publish or otherwise make available forward-looking statements of this nature. All such forward-looking statements, whether written or oral, and whether made by us or on our behalf, are expressly qualified by the cautionary statements described on this message including those set forth below.

Forward-looking statements are based upon management’s beliefs, assumptions and current expectations concerning future events and trends, using information currently available, and are necessarily subject to uncertainties, many of which are outside our control. In addition, we undertake no obligation to update or revise any forward-looking statements made by us or on our behalf, whether as a result of future developments, subsequent events or circumstances, or otherwise, or to reflect the occurrence or likelihood of unanticipated events, and we disclaim any such obligation.

Forward-looking statements are only predictions that relate to future events or our future performance and are subject to known and unknown risks, uncertainties, assumptions, and other factors, many of which are beyond our control, that may cause actual results, outcomes, levels of activity, performance, developments, or achievements to be materially different from any future results, outcomes, levels of activity, performance, developments, or achievements expressed, anticipated, or implied by these forward-looking statements. Although we believe 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 or by which any such performance or results will be achieved. 3D System’s actual results could differ materially from those stated or implied in forward-looking statements. Past performance is not necessarily indicative of future results. We do not undertake any obligation to and do not intend to update any forward-looking statements whether as a result of future developments, subsequent events or circumstances or otherwise.

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 report 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.

3D SYSTEMS

VYOMESH JOSHI

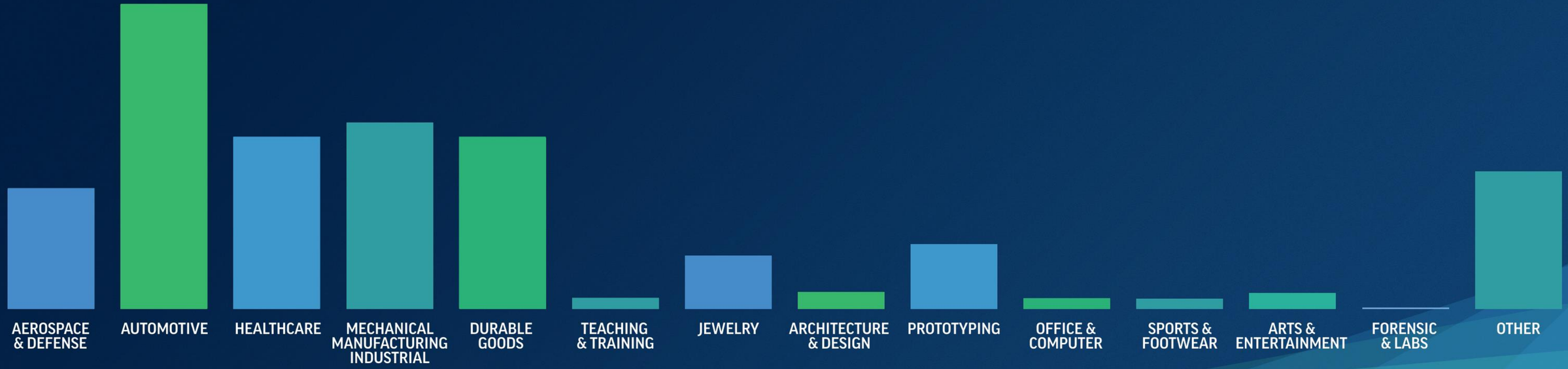
PRESIDENT AND CEO, 3D SYSTEMS

3D SYSTEMS

CUSTOMER

CUSTOMER
USE CASES

CUSTOMER SEGMENTATION



TEACHING & TRAINING

	STRATEGIC DIRECTION	ORGANIZATION & PROCESSES	TECHNOLOGY ENABLEMENT
4 STRATEGIC APPLICATIONS ACROSS COMPANY	▸ Embedded in company strategy ▸ C-level sponsorship	▸ Embedded in relevant operational areas	▸ Production locations ▸ Research centers
3 APPLICATION IN "CHAMPION" DEPARTMENTS	▸ Clear direction of application	▸ "Champion" departments ▸ First cross-functional teams	▸ Own systems ▸ Established collaborations
2 EXPERIMENTING & TESTING	▸ Invest, test and understand the technology	▸ Test 3DP technology ▸ No structured process	▸ Testing different technologies
1 NO EXPERIENCE	▸ Leadership has no or low awareness	▸ Evaluation and consideration	▸ First considerations of form of application

*Ernst & Young's Global 3D Printing Report 2016, 3DP Maturity Model

MAKING 3D PRODUCTION REAL

PRODUCTIVITY

DURABILITY

REPEATABILITY

TCO

ANALOG TO DIGITAL PRINTING

DIGITAL MANUFACTURING WORKFLOW

3D SYSTEMS

HARDWARE

HARDWARE

CUSTOMER

HARDWARE

CUSTOMER

HARDWARE

CHUCK HULL

EXECUTIVE VICE PRESIDENT,
CHIEF TECHNOLOGY OFFICER, 3D SYSTEMS

CUSTOMER

HARDWARE

MATERIALS

CUSTOMER
MATERIALS
HARDWARE
3D SYSTEMS

JIM RUDER

SENIOR VICE PRESIDENT, GENERAL MANAGER,
PLASTICS, 3D SYSTEMS

CUSTOMER
MATERIALS
HARDWARE
3D SYSTEMS

SUPPORT
SERVICES

SUPPORT SERVICES

SOFTWARE

DIGITIZE

- Geomagic® for SOLIDWORKS®
- Geomagic® Design X™
- Geomagic Wrap®

DESIGN

- Geomagic® Sculpt™
- Geomagic® Freeform®
- Geomagic® Freeform Plus™
- Geomagic® Design™

SIMULATE

- Cimatron®
- GibbsCAM®

MANUFACTURE

- Cimatron®
- GibbsCAM®
- 3D Sprint™
- 3DXpert™

INSPECT

- Geomagic® Control X™

MANAGE

- Geomagic® Control X™

JIM HEPPELMANN

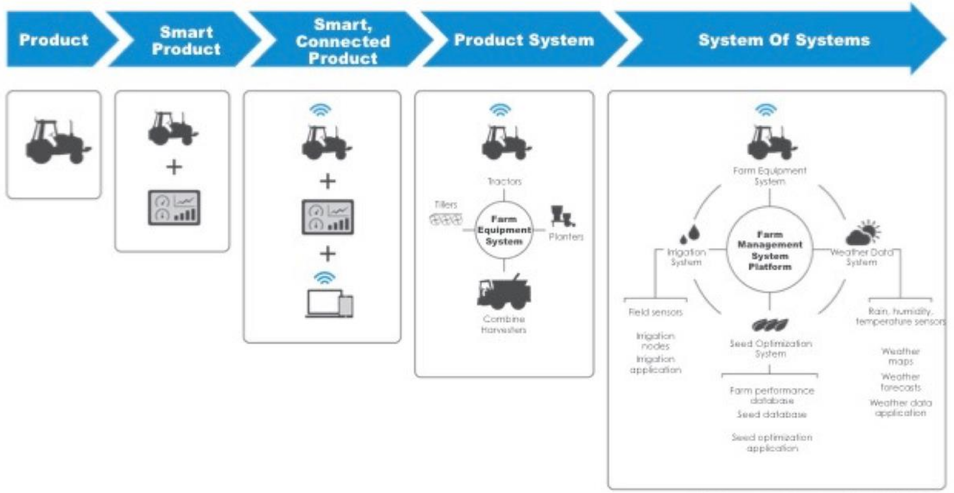
PRESIDENT AND CHIEF EXECUTIVE OFFICER, PTC

3D SYSTEMS

ptc

THINGS ARE CHANGING…

ptc



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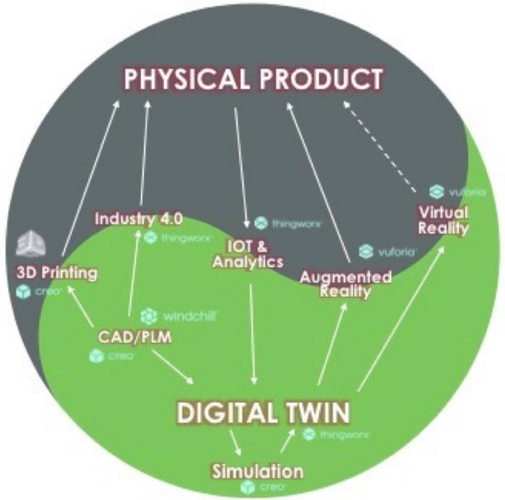
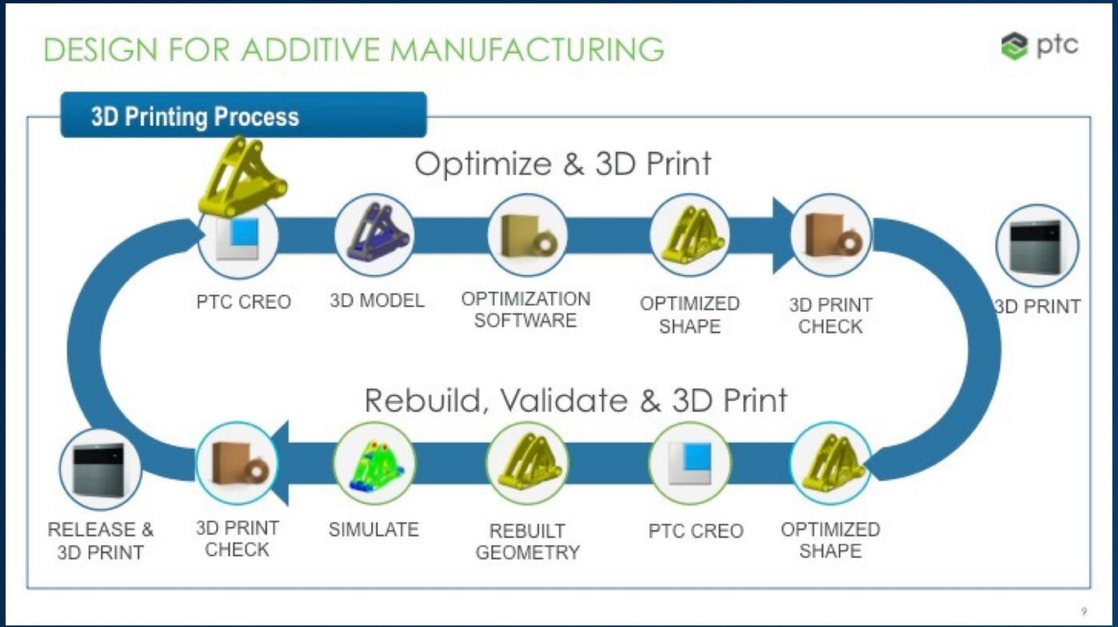
ptc


PHYSICAL PRODUCT
Industry 4.0
thingworx
IOT &
Analytics
thingworx
vuforia
Virtual
Reality
3D Printing
creo
windchill
CAD/PLM
creo
vuforia
Augmented
Reality
DIGITAL TWIN
thingworx
Simulation
creo

VISUAL EXAMPLE OF PHYSICAL & DIGITAL CONVERGENCE

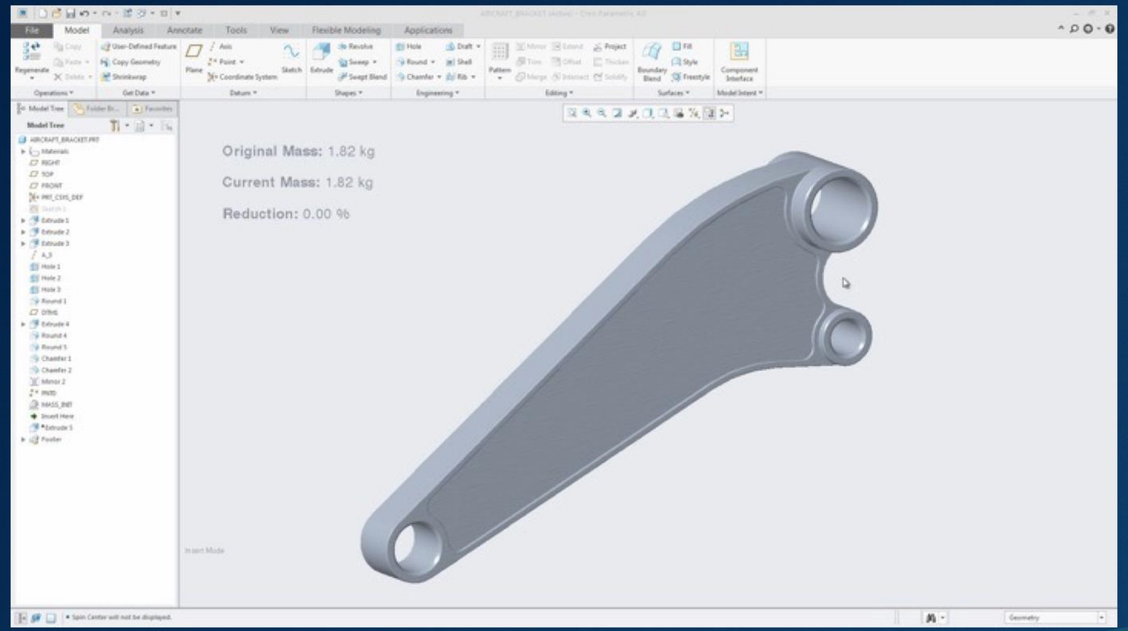
ptc


DESIGN FOR ADDITIVE MANUFACTURING
ptc
3D Printing Process
Optimize & 3D Print
PTC CREO
3D MODEL
OPTIMIZATION SOFTWARE
OPTIMIZED SHAPE
3D PRINT CHECK
3D PRINT
Rebuild, Validate & 3D Print
RELEASE & 3D PRINT
3D PRINT CHECK
SIMULATE
REBUILT GEOMETRY
PTC CREO
OPTIMIZED SHAPE
9

DESIGN FOR ADDITIVE MFG

ptc

3D Printing Process


Original Mass: 1.82 kg
Current Mass: 1.82 kg
Reduction: 0.00 %

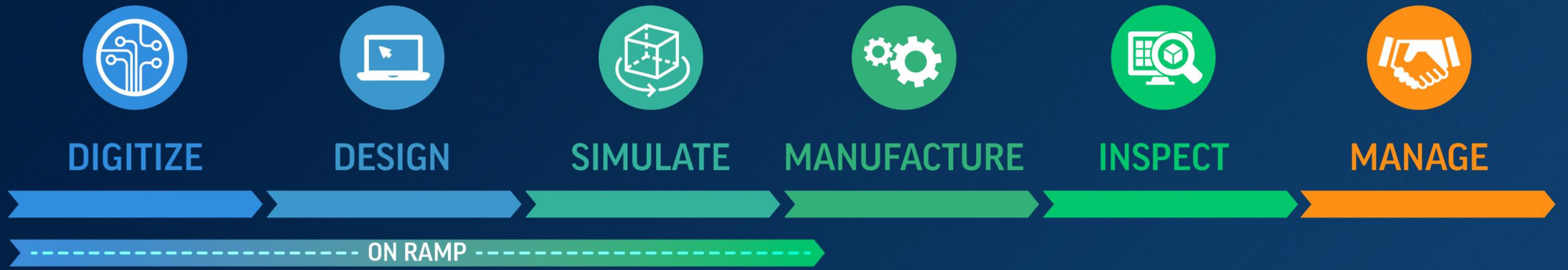
ptc

STRATEGIC
PARTNERSHIPS

STRATEGIC PARTNERSHIPS

ON DEMAND
SOLUTIONS

ON DEMAND SOLUTIONS



STRATEGIC PARTNERSHIPS
ON DEMAND SOLUTIONS
SOFTWARE
SUPPORT SERVICES
CUSTOMER
MATERIALS
HARDWARE

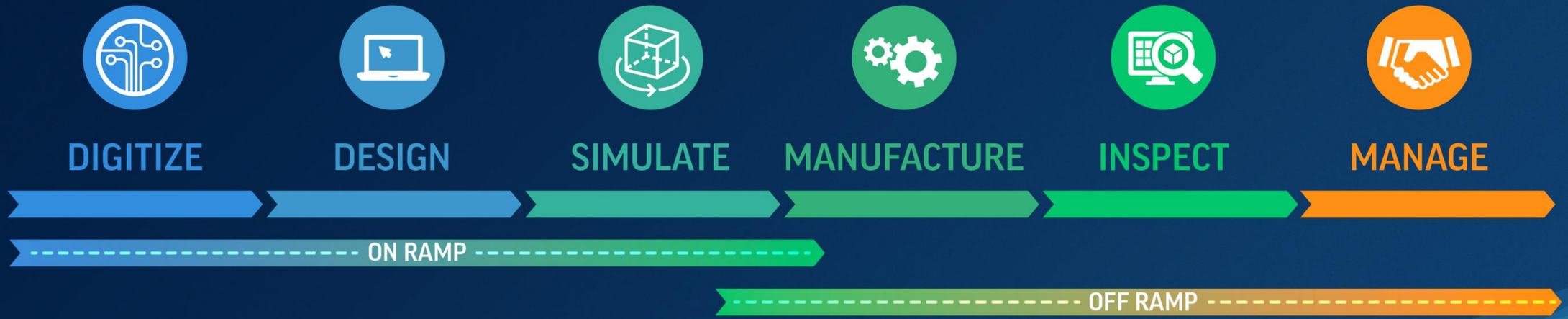
3D SYSTEMS

KARL MEYER

VICE PRESIDENT, ENTERTAINMENT, 3D SYSTEMS

Touch

ON DEMAND SOLUTIONS

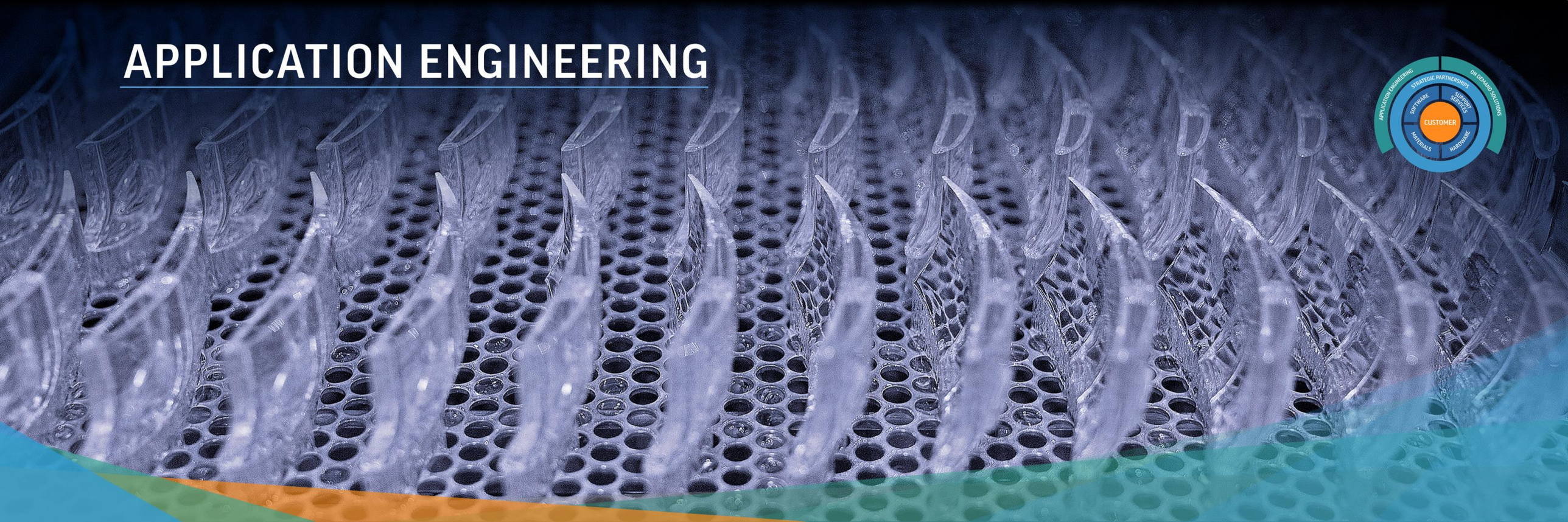


APPLICATION ENGINEERING

PATRICK DUNNE

VICE PRESIDENT, ADVANCED APPLICATION DEVELOPMENT,
3D SYSTEMS

APPLICATION ENGINEERING



INDUSTRIAL APPLICATIONS

WAVE 1

- RAPID PROTOTYPING

WAVE 2

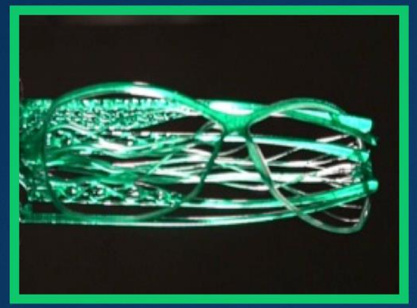
- INDIRECT MANUFACTURING

WAVE 3

- CUSTOM MANUFACTURING

WAVE 4

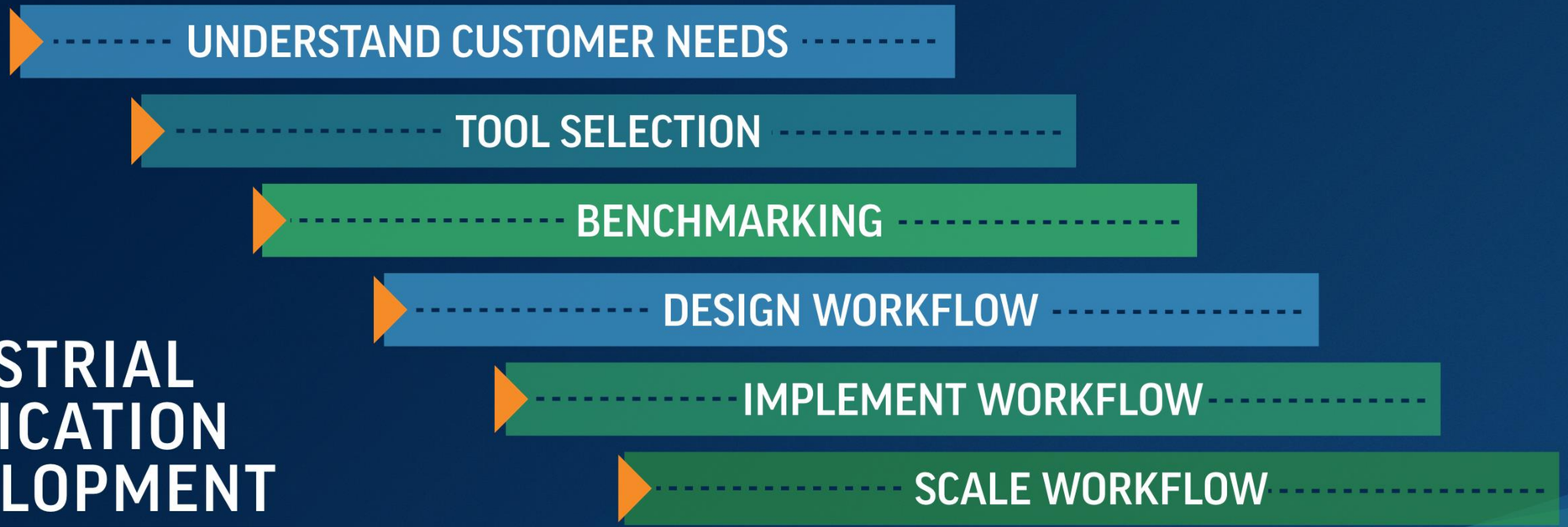
- COMPLEX MANUFACTURING



WAVE 5

- 3D PRODUCTION

INDUSTRIAL APPLICATION DEVELOPMENT



CUSTOMER INNOVATION CENTERS

CUSTOMER INNOVATION CENTERS

Leuven, Belgium

Denver, Colorado

Rock Hill, South Carolina

San Diego, California

CHANNEL PARTNERS

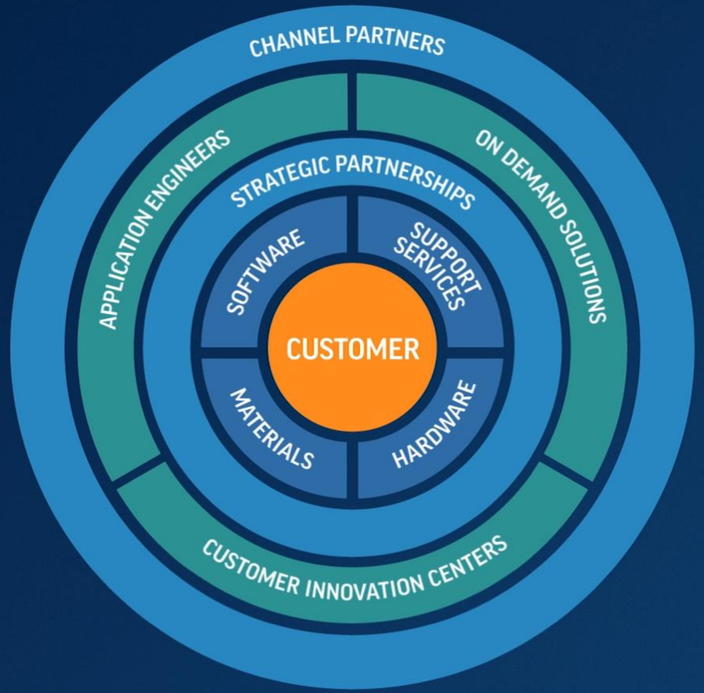
CHANNEL PARTNERS

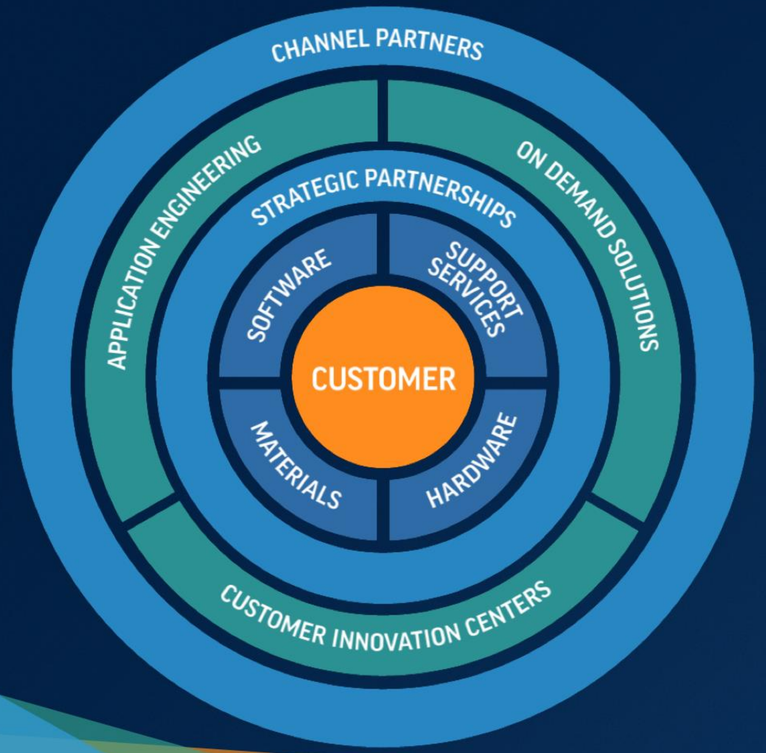
JAMIE HANSON

CHIEF OPERATING OFFICER, METHODS 3D

Figure 4

The Ultra-Fast, Automated Additive Manufacturing Solution for the Factory Floor


CHANNEL PARTNERS
APPLICATION ENGINEERS
ON DEMAND SOLUTIONS
STRATEGIC PARTNERSHIPS
SOFTWARE
SUPPORT SERVICES
CUSTOMER
MATERIALS
HARDWARE
CUSTOMER INNOVATION CENTERS



ECOSYSTEM ENABLES WORKFLOW

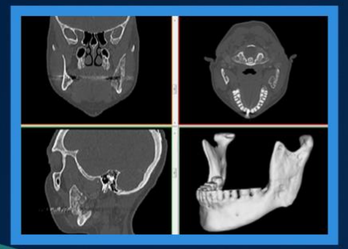
DIGITIZE → DESIGN → SIMULATE → MANUFACTURE → INSPECT → MANAGE

KATIE WEIMER

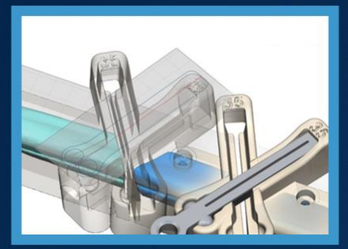
VICE PRESIDENT, MEDICAL DEVICES, HEALTHCARE,
3D SYSTEMS

HEALTHCARE

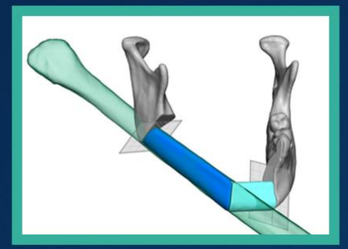
DIGITIZE



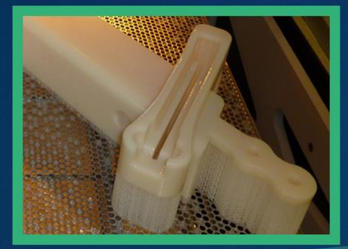
DESIGN



SIMULATE

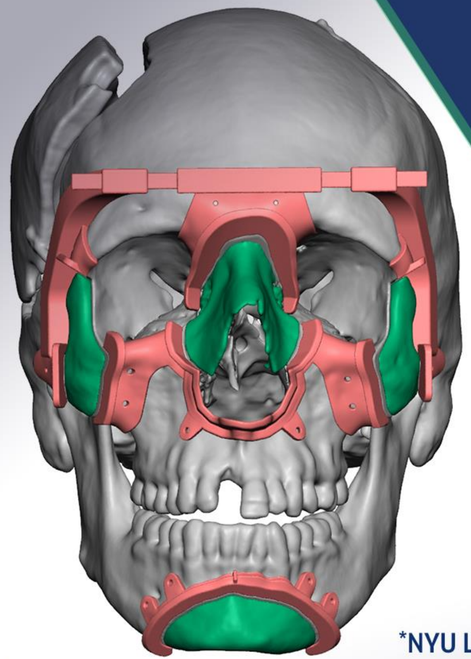


MANUFACTURE



INSPECT

MANAGE



*NYU Langone Medical Center

3D SYSTEMS

ERIC MAJOR

PRESIDENT & CHIEF EXECUTIVE OFFICER, K2M

K2M

FIRST

Leading spine company to offer a 3D-printed implant

MOST COMPREHENSIVE

Portfolio of FDA-cleared 3D-printed titanium interbodies

ONLY

Spine company in the US to offer both a 3D-printed titanium interbody and an allograft solution

3D SYSTEMS

KEVIN McALEA

EXECUTIVE VICE PRESIDENT, GENERAL MANAGER,
METALS & HEALTHCARE, 3D SYSTEMS

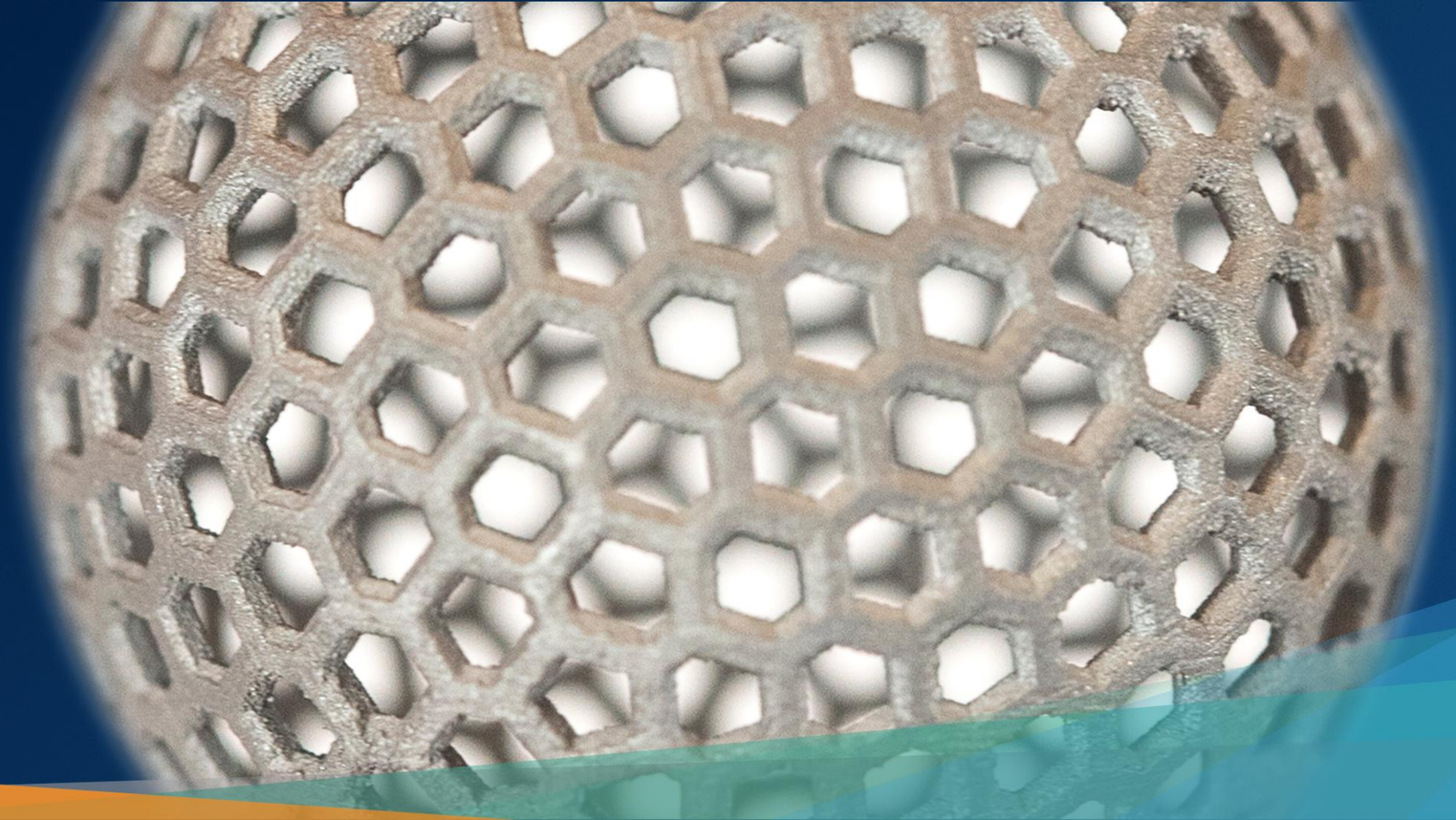
METALS SOLUTIONS

HAVELLS SYLVANIA

VALUE DRIVERS

- 20:1 PCR (PART COUNT REDUCTION)
- 50% LESS THERMAL MASS
- 3X EXTENSION OF MEAN TIME BETWEEN FAILURE
- 20% MORE EXPENSIVE
- 60% MORE AFFORDABLE WHEN DURATION OF SERVICE IS TAKEN INTO ACCOUNT

METALS SOLUTIONS



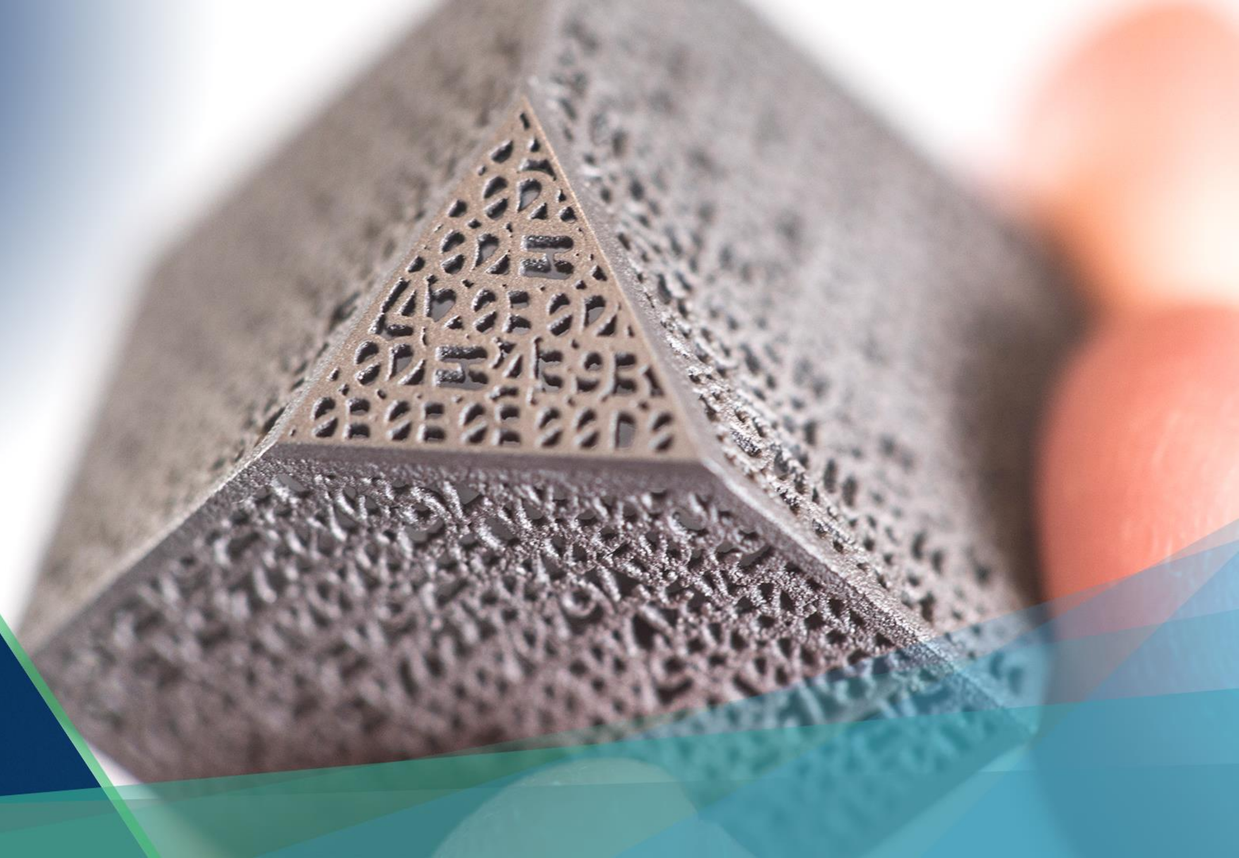
DR. ROB CARTER

CHIEF, MATERIALS MANUFACTURING TECHNOLOGY BRANCH
U.S. ARMY RESEARCH LABORATORY

U.S.ARMY

ARL

METALS SOLUTIONS



ROY STERENTHAL

VICE PRESIDENT, ENGINEERING, SOFTWARE, 3D SYSTEMS

3DXpert™

3DXPERT VIDEO

3D SYSTEMS

EXECUTION

ORGANIZATION

Kevin McAlea
EVP, General Manager,
Metals & Healthcare

Jim Ruder
SVP, General Manager,
Plastics

Chuck Hull
EVP,
Chief Technology Officer

Ilan Erez
SVP, General Manager
Software

Phil Schultz
SVP, General Manager,
On Demand Solutions

Chris Morgan
SVP, General Manager
AMER & APAC

Herbert Koeck
SVP, General Manager
EMEA

Vyomesh Joshi (VJ)
President &
Chief Executive Officer

John McMullen
EVP,
Chief Financial Officer

Reinhard Winkler
SVP,
Supply Chain

Doug Vaughan
SVP, Marketing and Demand
Generation

Hugh Evans
VP, Corporate Development
and Ventures

Andy Johnson
EVP, Chief Legal Officer
& Secretary

Amy Decker
SVP,
Human Resources

David Styka
SVP,
Transformation PMO

JOHN McMULLEN

EXECUTIVE VICE PRESIDENT, CHIEF FINANCIAL OFFICER, 3D SYSTEMS

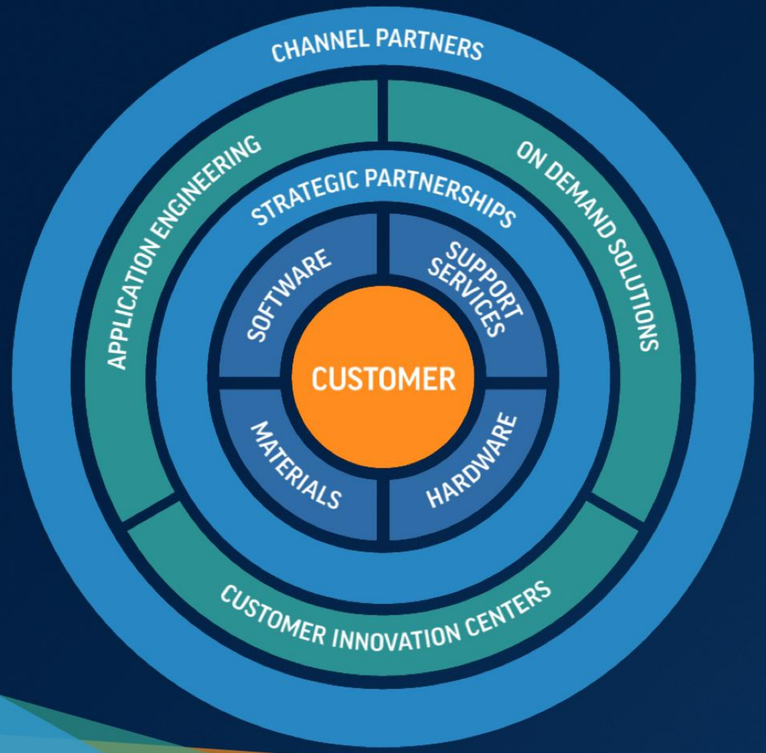
REINHARD WINKLER

SENIOR VICE PRESIDENT, SUPPLY CHAIN, 3D SYSTEMS

CHRIS MORGAN

SVP, GENERAL MANAGER, AMER & APAC, 3D SYSTEMS

OPERATIONAL FRAMEWORK



MAKING 3D PRODUCTION REAL

DIGITIZE DESIGN SIMULATE MANUFACTURE INSPECT MANAGE

ADDITIVE MANUFACTURING PAVILION - NORTH BUILDING N68
CAD/CAM PAVILION - EAST BUILDING E3310
METAL CUTTING PAVILION - SOUTH BUILDING S9119 (METHODS MACHINE TOOLS)

3D SYSTEMS

STRATEGY AND SOLUTIONS TO MAKE 3D PRODUCTION REAL

3D SYSTEMS

STRATEGY AND SOLUTIONS TO MAKE 3D PRODUCTION REAL