

# 3D Printing: The Benefits of Additive Manufacturing, From Design to Production

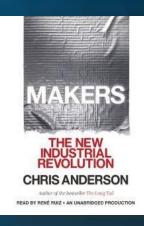
PETER SECOR June 8, 2016

### It's hard to ignore societies interest in 3D printing because...





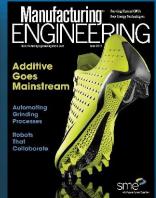




















# 3D PRINTING IGNITES INNOVATION!

### So what are 3D Printing technologies?

3D printing processes are automated systems that take 2-dimensional layers of computer data and rebuild them into 3D solid objects



#### **Stratasys Overview**

For more than 25 years, Stratasys has been at the forefront of 3D printing and additive manufacturing innovation.

**HEADQUARTERED** IN EDEN PRAIRIE, MINNESOTA AND REHOVOT, ISRAEL

OVER **800** GRANTED OR **PENDING ADDITIVE MANUFACTURING PATENTS GLOBALLY** 

**151,149** CUMULATIVE SYSTEMS SOLD\*

**OVER 30 TECHNOLOGY AND** LEADERSHIP AWARDS

**PUBLICALLY TRADED ON NASDAQ (SSYS)** 

\$696 Million REVENUE (2015)

\*AS OF March 31, 2016

#### **Stratasys 3D Printing Integrated Solutions Offering**





### 3D PRINTING CHANGESTHEGAME

**Product** Personaliza-Increased Design Changes in the tion Part **Economies of** Freedom Cost Reduction Production **Functionality Environment Sustainability New Business** Models

**strata**sys



# Design & Geometric Freedom





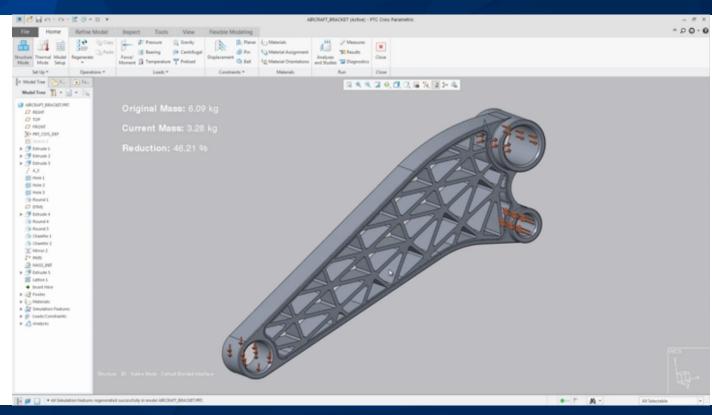
# Design & Geometric Freedom





## Design & Geometric Freedom

PTC®



### Increased Part Functionality





### **Product Personalization**

normal



# Cost Reduction & Improved Environmental Sustainability







### New Business Models & Supply Chains





### Butepoly Chaiply ransformation

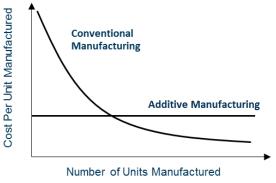


Customers

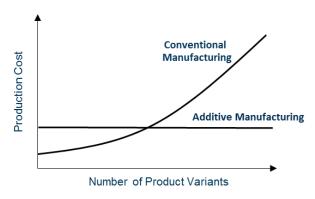


## Changes in Economies of Production

### Economies of Scale

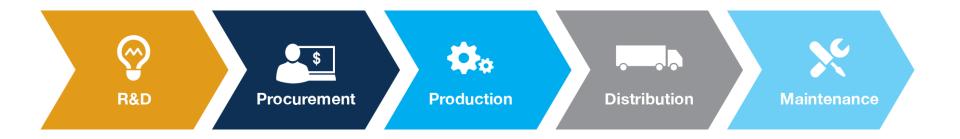


#### **Economies of Scope**



# 3D PRINTING AT YOUR COMPANY

### 3D PRINTING CAN IMPACT EACH STAGE

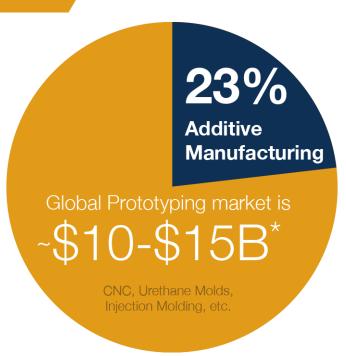






### **DISRUPTING R&D PROCESS**

Today Rapid Prototyping is the Dominant 3d Printing Application



### Long-term growth opportunities in key prototyping applications

Global Prototyping market is estimated at ~\$10-\$15B\*

- Additive Manufacturing technology today has ~23% penetration
- 77% of global prototyping market is CNC, Urethane Molds, Injection Molding, etc.

<sup>\*</sup>Based on Stratasys internal research –independent survey of 700 designers, engineers and executives conducted in August 2015





### **PRODUCTION**

JIGS & FIXTURES



**INJECTION MOLDS** 



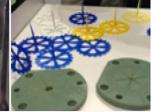
**ROBOTIC TOOLS** 



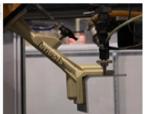












#### **OPEL Video**







#### ADDITIVE MANUFACTURING GOING FORWARD

- 1. Digital factories connected in the cloud
- 2. Centralized design
- 3. Decentralized production
- Optimize capacity utilization and delivery based on ship-to or component assembly point
- 5. Seamless connection between customer/suppliers
- 6. Flexibility to deploy new digital factories to precisely meet customer, product, or supply chain demands





#### **THANK YOU**

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