Industrial Production at the Point of Need

Massive opportunity today as manufacturers seek more resilient supply chains
Disclaimer

Forward-Looking Statements. This presentation (the “Presentation”) contains forward-looking statements that are based on beliefs and assumptions and on information currently available. In some cases, you can identify forward-looking statements by the following words: “may,” “will,” “could,” “would,” “should,” “expect,” “intend,” “plan,” “strategy,” “anticipate,” “believe,” “estimate,” “predict,” “project,” “potential,” “continue,” “ongoing,” “opportunity” or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. These statements involve risks, uncertainties and other factors that may cause actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although Markforged believes that it has a reasonable basis for each forward-looking statement contained in this Presentation, Markforged cautions you that these statements are based on a combination of facts and factors currently known by it and its projections of the future, about which it cannot be certain. Forward-looking statements in this Presentation include, but are not limited to, future growth rate, revenue, gross profit margin and earnings guidance; timing for achieving profitability; our ability to fulfill orders for our products in a timely fashion in the future; expected growth, the size of and opportunity to increase our addressable market; the anticipated benefits of the acquisition of Teton Simulation and Digital Metal, the timing of the launches of and the rate and extent of adoption of our products, including, but not limited to, our most recently introduced products; market trends in the manufacturing industry; the duration and impact effects of macroeconomic factors; and the benefits to consumers, functionality and applications of Markforged’s products. Markforged cannot assure you that the forward-looking statements in this Presentation will prove to be accurate. These forward-looking statements are subject to a number of risks and uncertainties, including, among others, general economic, political and business conditions, including war and armed conflict in Israel, Gaza and the Middle East generally; the ability of Markforged to maintain its listing on the New York Stock Exchange; the effect of COVID-19 on Markforged’s business and financial results; the outcome of any legal proceedings against Markforged; and those factors discussed under the header “Risk Factors” in Markforged’s most recent periodic and other filings with the SEC. Furthermore, if the forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that Markforged will achieve its objectives and plans in any specified time frame, or at all. The forward-looking statements in this Presentation represent Markforged’s views as of the date of this Presentation. Markforged anticipates that subsequent events and developments will cause its views to change. However, while Markforged may elect to update these forward-looking statements at some point in the future, Markforged has no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing Markforged’s views as of any date subsequent to the date of this Presentation. 

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Inflection point is driving onshoring for more resilient and flexible supply chains.
Building resilient and flexible manufacturing – the $43B* opportunity available today

Keeping the factory running with on demand part production at the point of need

*Market segment size data aggregated from Grandview Research, Allied Market Research, Fortune BI, Verified Research, and Imarc Group. TAMs based on share of part spend justifiable for printing using Markforged technology per customer interviews, workshops, and Aozora Consulting analysis.

**Total Manufacturing market size data per Kearney.
Markforged’s platform, The Digital Forge brings resiliency to thousands of manufacturing floors today

The Digital Forge is the reliable, easy-to-use and intelligent Additive Platform

**Easy-to-use software and advanced SaaS modules increase additive adoption at scale.**

**Gets smarter with every print.**

**Wide range of applications across 28 proprietary metals and composites to answer mission critical manufacturing applications.**

**Metal & Composite Printers**

11 printers and sintering furnaces, which build strong end-use parts at the point of need

**Software**

**Materials**
**Our Flywheel Drives Utilization and Reliability**

The Digital Forge continuously improves through over-the-air updates.

- **More customers**
  - Grow Expertise at the Speed of Global Production
    - New printers are added to network to scale manufacturing capacity

- **Better parts**
  - Consistent Improvement
    - Federated fleet learning combined with real-time part corrections create a reliable and repeatable production process

- **More part data**
  - Part Prep and Fleet Management
    - Simulation enables pre print strength testing. Devices are constantly streaming back data on parts and performance.

- **Printers get smarter**
  - Part Scanning and Industrial IoT
    - Drives AI-powered part quality improvements across entire fleet
Patented **Continuous Fiber Reinforcement (CFR)** technology enables customers to replace metal with our solution.

![Diagram showing tensile strength comparison](image)

Part printed without CFR

CFR routed through part

<table>
<thead>
<tr>
<th>Material</th>
<th>Tensile Strength (MPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS Plastic</td>
<td>0</td>
</tr>
<tr>
<td>Markforged Onyx</td>
<td>50</td>
</tr>
<tr>
<td>Aluminum (Aircraft Grade 6061)</td>
<td>400</td>
</tr>
<tr>
<td>Markforged CFR</td>
<td>800-1000</td>
</tr>
</tbody>
</table>

CFR is 25x stronger than ABS plastic and 2-3x stronger than aluminum.

*Markforged internal test results as of December 2020*
Proven Manufacturing Portfolio, Expanding TAM through Innovation

**2016**
Mark Two
ADVANCED COMPOSITES
The easiest and efficient way to replace metal parts with advanced composites.

**2018**
X7
ADVANCED COMPOSITES
Industrial and smart continuous fiber reinforcement 3D printer for real manufacturing applications.

**2018**
Metal X
METAL
End to end metal 3D printer for functional metal parts.

**2024**
FX10
ADVANCED COMPOSITES
Nearly twice as large and twice as fast as the X7, with enhanced automation features to supercharge productivity and utilization.

**2022**
FX20
ADVANCED COMPOSITES
Our Production Beast. Large scale, precise continuous fiber 3D Printer for high-temp materials.

**2024**
PX100
METAL
A step change in metal binder jetting enabling high volume production of precise metal parts for reliable industrial production.
Our Customers are Leading the Charge.

MANUFACTURING LINE SUPPORT

Customer: Vestas
Application: Inspection gauges & end use parts

“The Digital Forge has given us a powerful platform to circumvent expensive, multi step and time consuming conventional manufacturing.”

FLEET EXPANSION: 22X OVER 5 YEARS

MACHINERY & AUTOMATION

Customer: Dixon
Application: Tooling & fixtures

“Markforged is a critical company and a critical component, it is really changing the way we work to make way for this groundbreaking product.”

FLEET EXPANSION: 4X OVER 5 YEARS WITH 6000 UNIQUE PARTS

AEROSPACE & DEFENSE

Customer: Sidus
Application: End use satellite parts

“It just always works. It never stops working. It never breaks down and it makes perfect parts. And I love it. I can’t get enough of the machine.”

FLEET EXPANSION: 3X TO REACH FLIGHT READY

*The performance data and client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on configurations and operating conditions.
Solving Metal Problems for the World’s Leading Companies

Industrial Automation
Replacing traditional infrastructure.

Aerospace Industry
Flying on military aircraft and orbiting the International Space Station.

Military & Defense
Supporting troops in combat zones.

Automotive Industry
Enabling vehicle production.

Healthcare & Medical
Protecting lives with critical medical equipment.

Research Institutions
Building brand loyalty with the next generation of engineers.

Note: Select customers included. Not inclusive of entire customer base. Use of logos does not imply endorsement.
Introducing FX10™ – Built to Supercharge Manufacturing Productivity

Building robust backlog, with shipments beginning 2024

The FX10, nearly twice as large and twice as fast as the X7.

Heated print chamber for increased performance and a growing material library.

Enhanced automation features for turnkey continuous printing to maximize utilization.
Introducing Digital Source

An on demand platform for 3D printing OEM certified parts, when and where they’re needed.

Part Design Owners

OEMs upload certified parts to Digital Source

Approved customers can search digital catalogs and print parts

End Customers (On-Site Printer)

Print Service Providers

Encrypted part files/designs sent directly to printers

End Customers (Without a Printer)
We’re Not Building a Network We’re Turning One On

Digital Source—The iTunes of Manufacturing

With 14,000 + active printers deployed in 5,500 factory locations across the world the network is already built, we just have to turn it on.

Opportunity for High Margin Recurring Revenue Streams

Product Expansion

Pay Per Print

Digital Transformation
Customer Story: Musashi Auto Parts

A leading manufacturer of differential gears and assemblies that has gained substantial return on investment from Markforged

Markforged Products: Mark Two and Metal X

Musashi utilizes the Markforged Mark Two and Metal X systems to produce production-grade end effectors and grippers in house, making them less reliant on third party vendors and builds resiliency into its supply chain. Markforged is now in 3 facilities across the globe, and Musashi has already identified over 40 different applications solved by The Digital Forge.

Grippers for Bevel Pinion CNC Lathing Cell require 24 pieces per lathe. Outsourced parts cost $164. With Markforged, the part costs $16.

Onyx Part Rests for the differential housing cut lead time from 4 weeks to less than a day, and cut costs from $50 to $4 per part.
Markforged is positioned for **Rapid Growth.**

- Expanding Product Portfolio
- Increasing Recurring Revenue Streams
- Strong Global Team
- Scalable 100+ Partner Network
- Robust Balance Sheet
Experienced & Visionary Management Team to Drive Us Forward

Shai Terem  
President & CEO

Assaf Zipori  
Acting Chief Financial Officer

Dorit Liberman  
Chief Human Resources Officer

Stephen Karp  
General Counsel

John Howard  
SVP, Engineering

Pelham Norville  
Chief Product Officer

Kara Weiner  
SVP, Operations

Andrew Hally  
Chief Marketing Officer

Ved Narayan  
President, APAC

Martin Krona  
President, EMEA
Q3 revenues were $20.1M down 20.4% year/year

Revenue decline driven by stronger than expected macroeconomic headwinds that delayed orders toward the end of the quarter

Revenue for 9 months ended September 30, 2023 was $69.6M, down 2.3% year/year compared to revenue in 9 months ended September 30, 2022 of $71.3M

Q3 Non-GAAP gross margins were 46.9%, down from 49.2% year/year

Non-GAAP gross margins were impacted by the lower sales volume, as well as the continued ramp of the production of FX20
Non-GAAP operating expenses were $24.9M in Q3, down by 12.7% year over year.

Improvement in operating expenses is a result of strong cost controls and commitment to building efficiencies.

Announced restructuring initiative in Nov 2023, which is expected to deliver operating costs savings of ~$9 - $12M in 2024 driven by an ~10% headcount reduction.

Net cash used in operating activities in the 9 months of 2023 decreased 38.7% from the first 9 months of 2022.

Cash utilization expected to decrease as a result of higher revenues, opex management and working capital efficiencies.

Cash, cash equivalents, and short-term investments were $126.0M as of September 30, 2023, down from $136.0M at the close of second quarter 2023.
2023 Financial Guidance

**Revenue**
$90 - 95 Million

*Non-GAAP Gross Margin*
47 - 48%

*Non-GAAP Operating Loss*
($59 - 61) Million

*Non-GAAP EPS*
($0.26) - ($0.28)

*We currently intend that non-GAAP reporting will exclude share-based compensation, other income, and other non-recurring, unusual and infrequent charges from our GAAP results.

**2023 Revenue guidance is on a GAAP basis.
As provided in the Company’s second quarter and year earnings conference call on November 13, 2023.
Reconciliation of GAAP to Non-GAAP Measures  
(in Thousands) (Unaudited)  

<table>
<thead>
<tr>
<th></th>
<th>2023</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAAP net loss</td>
<td>$ (89,369)</td>
<td>$ (14,656)</td>
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<tr>
<td>Stock-based compensation expense</td>
<td>10,158</td>
<td>15,620</td>
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<tr>
<td>Change in fair value of warrant liabilities</td>
<td>(220)</td>
<td>(1,221)</td>
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<tr>
<td>Change in fair value of contingent earnout liability</td>
<td>2,509</td>
<td>(50,982)</td>
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<tr>
<td>Amortization</td>
<td>780</td>
<td>42</td>
</tr>
<tr>
<td>Goodwill impairment</td>
<td>29,467</td>
<td>–</td>
</tr>
<tr>
<td>Non-recurring costs¹</td>
<td>7,039</td>
<td>4,420</td>
</tr>
<tr>
<td><strong>Non-GAAP net loss</strong></td>
<td>$ (39,636)</td>
<td>$ (46,777)</td>
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¹ Non-recurring costs incurred in 2023 primarily relate to long-lived asset impairment of $4.0 million and litigation expenses of $3.0 million. Non-recurring costs incurred in 2022 primarily relate to litigation expenses of $2.5 million and transaction costs of $1.9 million.
Reconciliation of GAAP to Non-GAAP Measures
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<tr>
<th></th>
<th>2023</th>
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<tbody>
<tr>
<td><strong>Non-GAAP Gross Profit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAAP gross profit</td>
<td>$ 32,723</td>
<td>$ 36,780</td>
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<tr>
<td>Stock-based compensation compensation expense</td>
<td>201</td>
<td>347</td>
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<tr>
<td>Amortization</td>
<td>660</td>
<td>31</td>
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<tr>
<td><strong>Non-GAAP gross profit</strong></td>
<td><strong>$ 33,584</strong></td>
<td><strong>$ 37,158</strong></td>
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<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-GAAP Operating Profit (Loss)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAAP operating loss</td>
<td>$ (92,020)</td>
<td>$ (67,793)</td>
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<tr>
<td>Stock-based compensation expense</td>
<td>10,158</td>
<td>15,620</td>
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<tr>
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<td>7,039</td>
<td>4,420</td>
</tr>
<tr>
<td><strong>Non-GAAP operating loss</strong></td>
<td><strong>$ (44,576)</strong></td>
<td><strong>$ (47,711)</strong></td>
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