

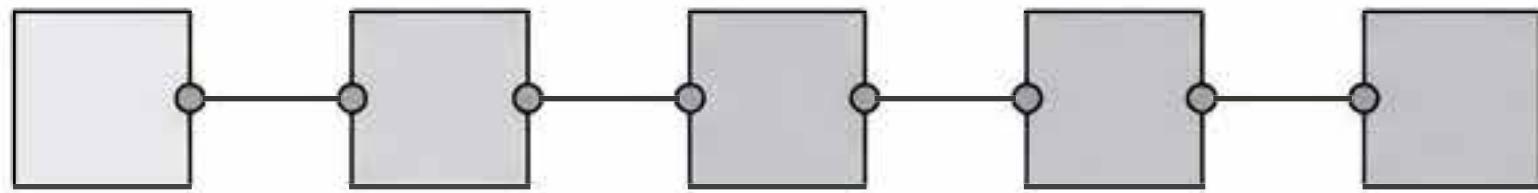
# The Autonomous Resource Corporation



Engineering the Future of Discovery

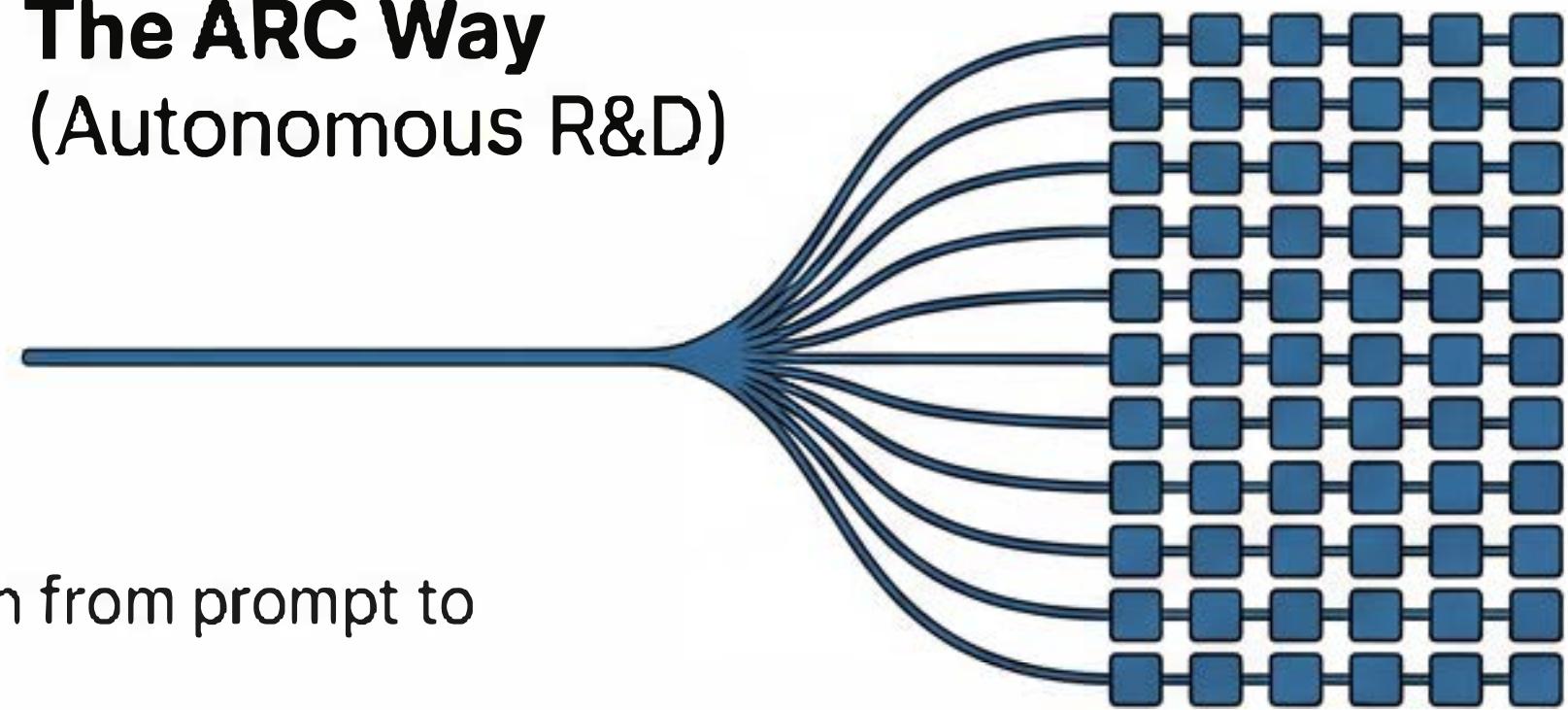
# The Acceleration Gap: Why Traditional Qualification is Failing.

## The Old Way (Traditional R&D)



Human-in-the-loop for every step  
Sequential, slow iterations  
Siloed data and processes  
Output: 5-10 experiments / week

## The ARC Way (Autonomous R&D)

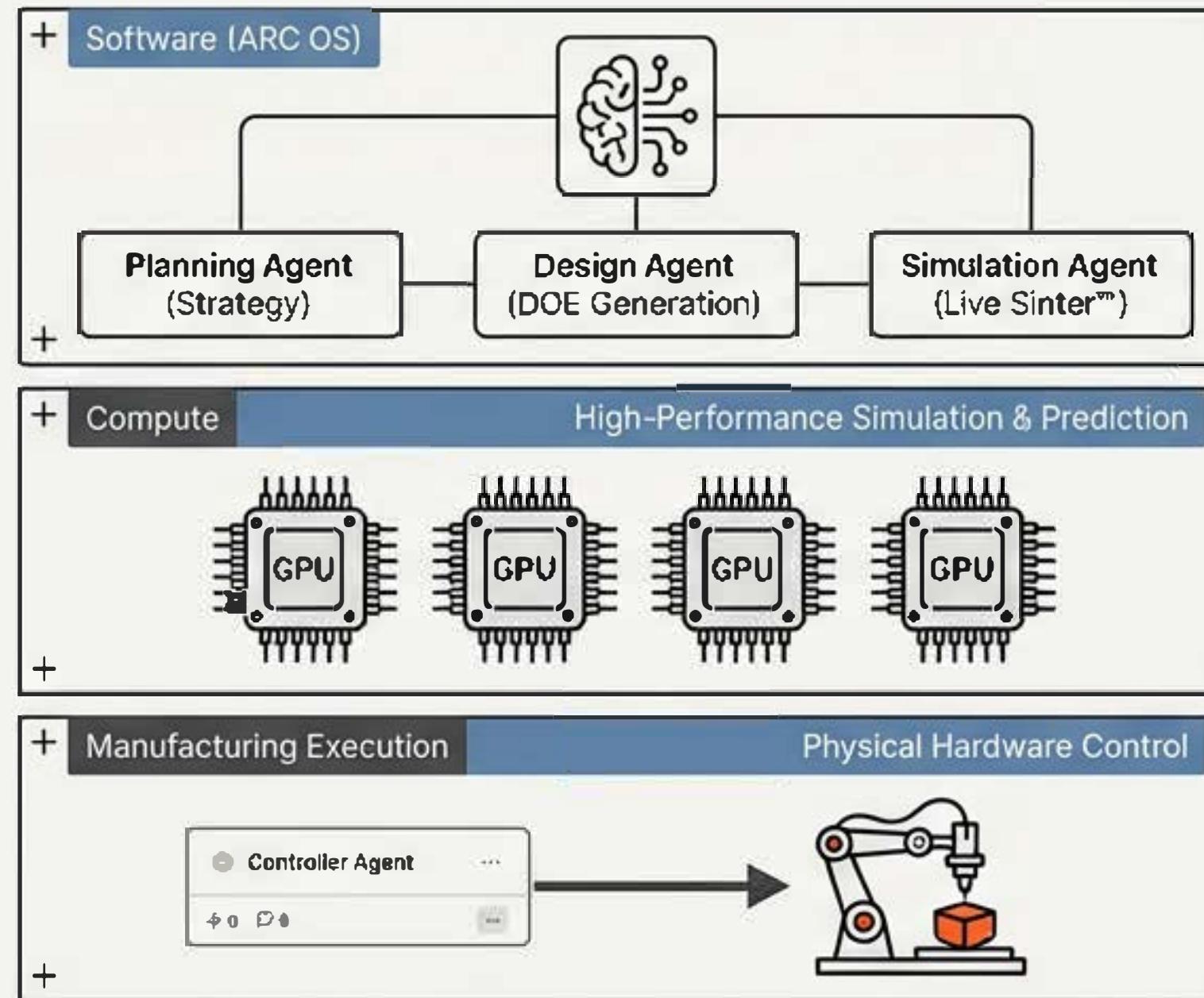


AI orchestration from prompt to production  
Massively parallel experimentation  
Continuous feedback and learning  
Output: Up to 200 experiments / week

**20x Increase**  
in Throughput Velocity

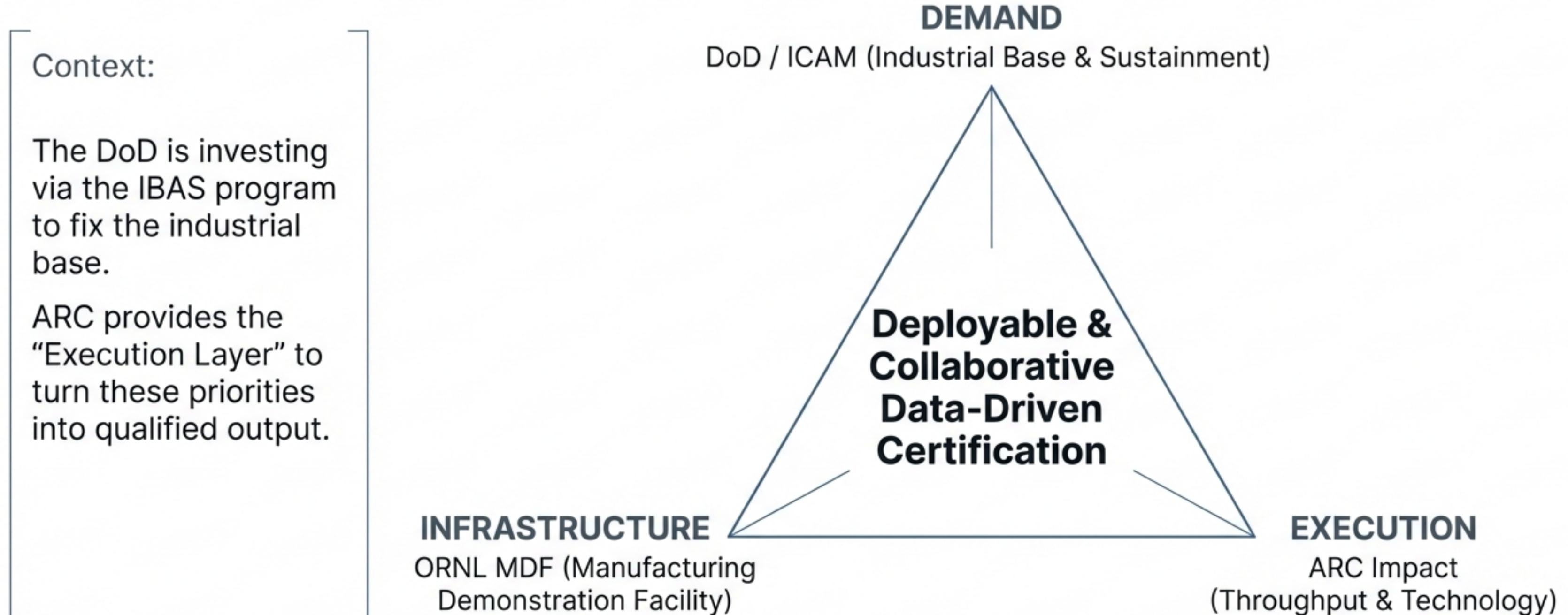
# Meet ADAM: The Planner-Executor-Critic Architecture

ADAM is an end-to-end AI platform for **Autonomous Discovery & Advanced Manufacturing**



# Strategic Wedge: Anchored by National Defense Priorities

We are the execution partner for the US Government's sovereign industrial strategy



# The Digital Factory: Validated Infrastructure & Data Backbone.



**X160Pro™** - World's Largest Binder Jet System (800 x 500 x 400 mm)

## Capability Stack

### Data Engineering Framework

- **Live Inspect Platform:** National-scale data ingestion and voxelization.
- Single Source of Truth for qualification.

### Real-Time Quality Assurance

- **Peregrine:** AI-based pixel-wise segmentation for powder bed.
- **Pelican:** AI monitoring for Directed Energy Deposition (DED).
- **SCOPS:** Optical process monitoring.

# From Single Prompt to Physical Production

```
ADAM Nova Terminal - Multi-Agent Autonomous Orchestrator

8:57:35 PM > Fe-Co alloy with optimized grain structure achieves 98% of NdFeB performance
8:57:35 PM > Creating experiment...
8:57:35 PM ✓ EXPERIMENT CREATED
ID: 3Sae6694-e20a-4286-a087-4022d9fe7ad7
Risk Level: R1
Status: pending

🚀 Auto-approved. Nova orchestrator will begin workflow immediately.
Watch this terminal for real-time progress updates.

Enter experiment hypothesis or command... Send
```

1. Engineer enters natural language hypothesis
2. ADAM designs experiment matrix (12 variations)
3. Controller Agent queues jobs to printer fleet

# Commercial Validation: The Siemens Case Study.

**SIEMENS**

## Case File

# The Challenge

# Process and Material Optimization for Mar247 high-performance nickel alloy.

Goal: Achieve **high density** using **recycled -45 micron powder** for **sustainability** and **cost efficiency**.

## The Process

## Printing coupons on **InnoventX systems.**

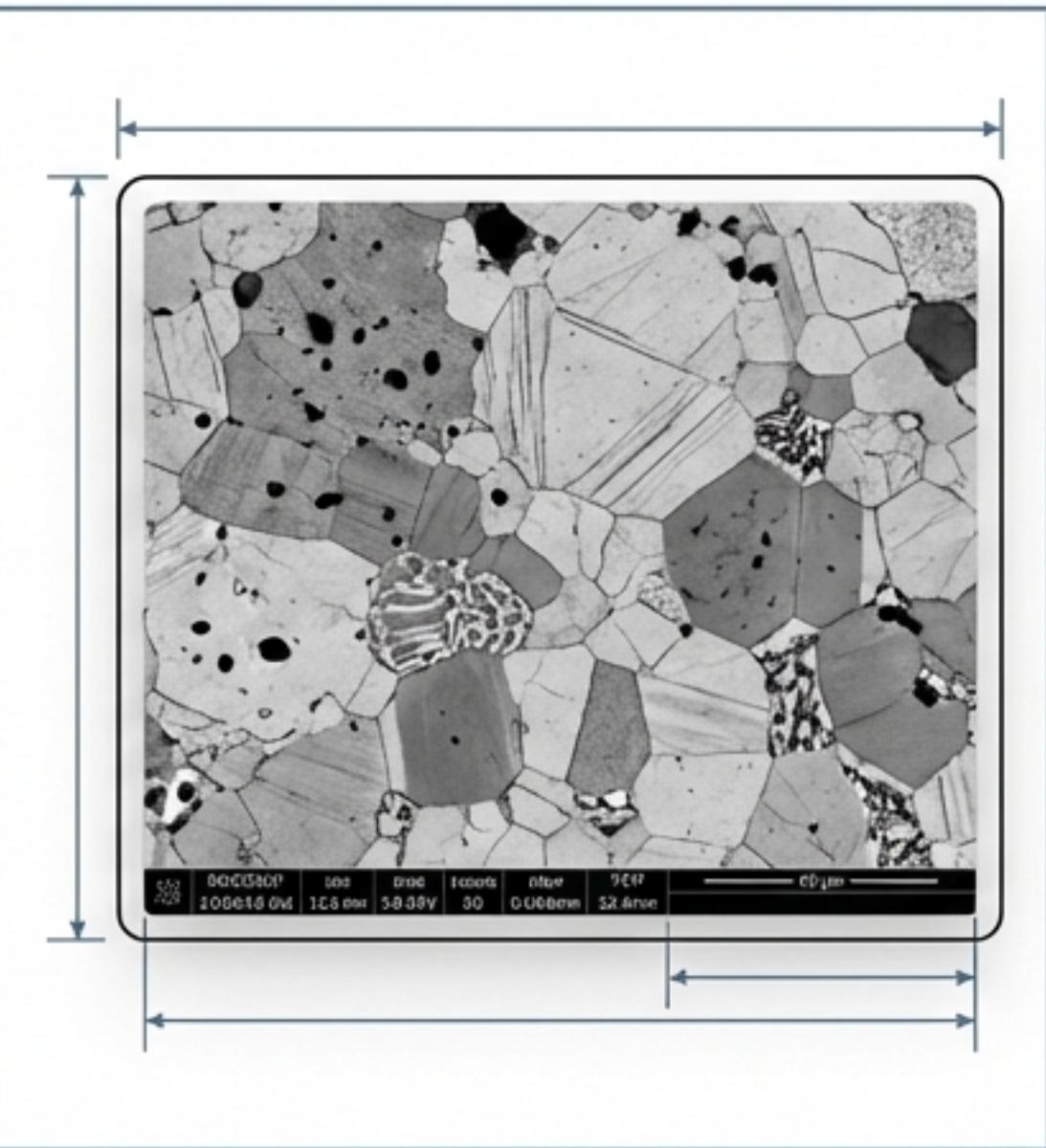
Running **5-10 sintering trials** with varying thermal profiles.

## Evaluation via **microscopy and** **carbon testing.**

## The Result

**Optimized sintering profiles** achieving **>97% sintered density target.**

**Validated 'Data-Driven Qualification' for top-tier commercial application.**



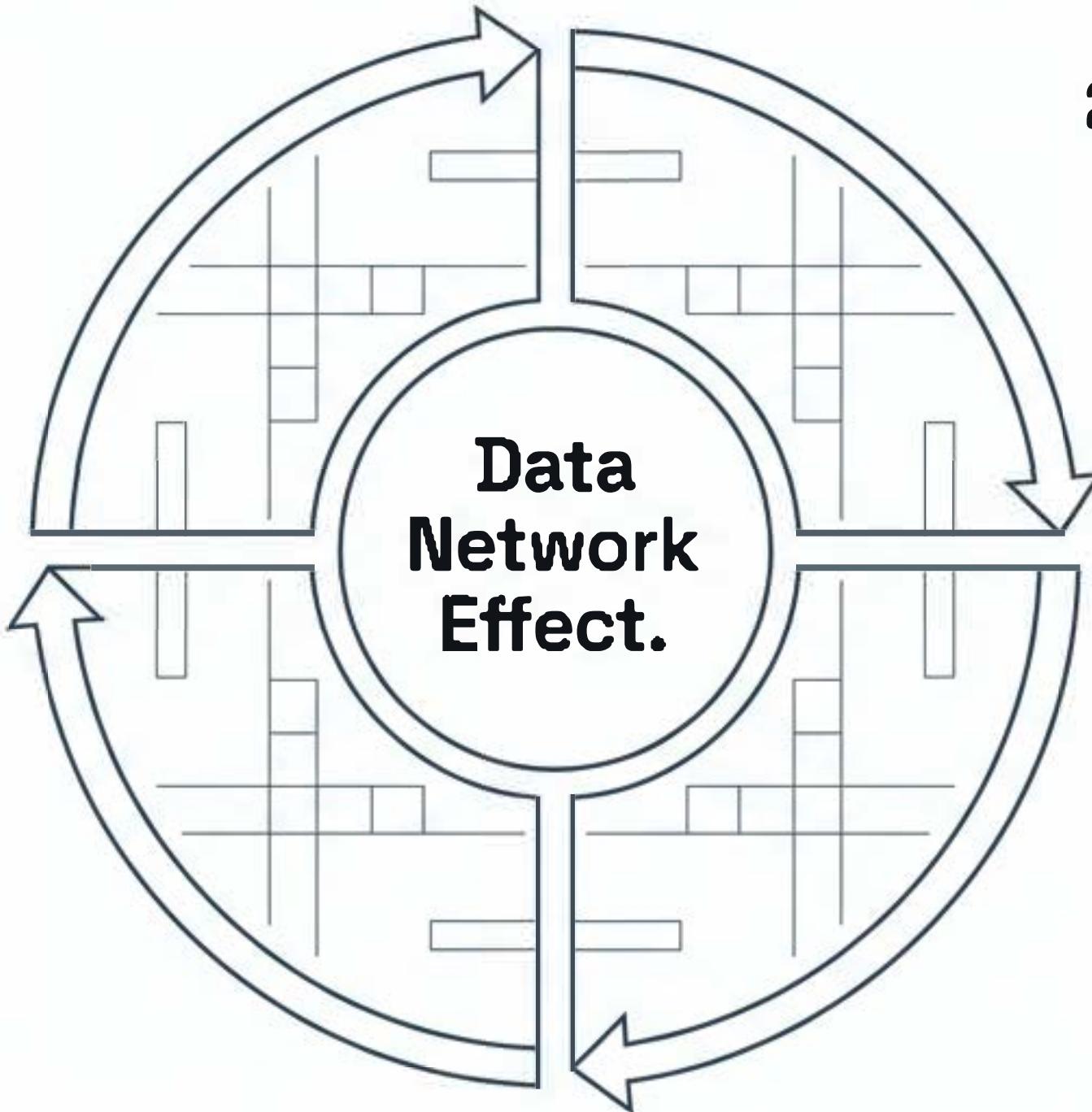
# A Diversified, Scalable Revenue Engine.

## 1. IBAS Anchor (Funded R&D)

\$500M / 10yr contract vehicle. Provides early scale and covers overhead.

## 4. Programs

Milestone-based discovery. Feeds subscription pipeline (**70% attach rate**).



## 2. Platform Subscription (ARC OS)

High-margin SaaS (**\$550k ACV**). The operating system for client R&D.

## 3. Usage-Based (ARCNet)

Compute (GPU-hours) + Manufacturing-as-a-Service (Build-hours + parts).

# Unit Economics & Growth Drivers

## Subscription Economics

**\$550k**

(Blended ACV)

1.15x NRR

12% Churn (Conservative)

## Program Conversion

**70%**

Program-to-Subscription Attach Rate

## Usage-Based Economics

**\$3.50**

(Per GPU-hour)

\$85/build-hour

\$250/part revenue

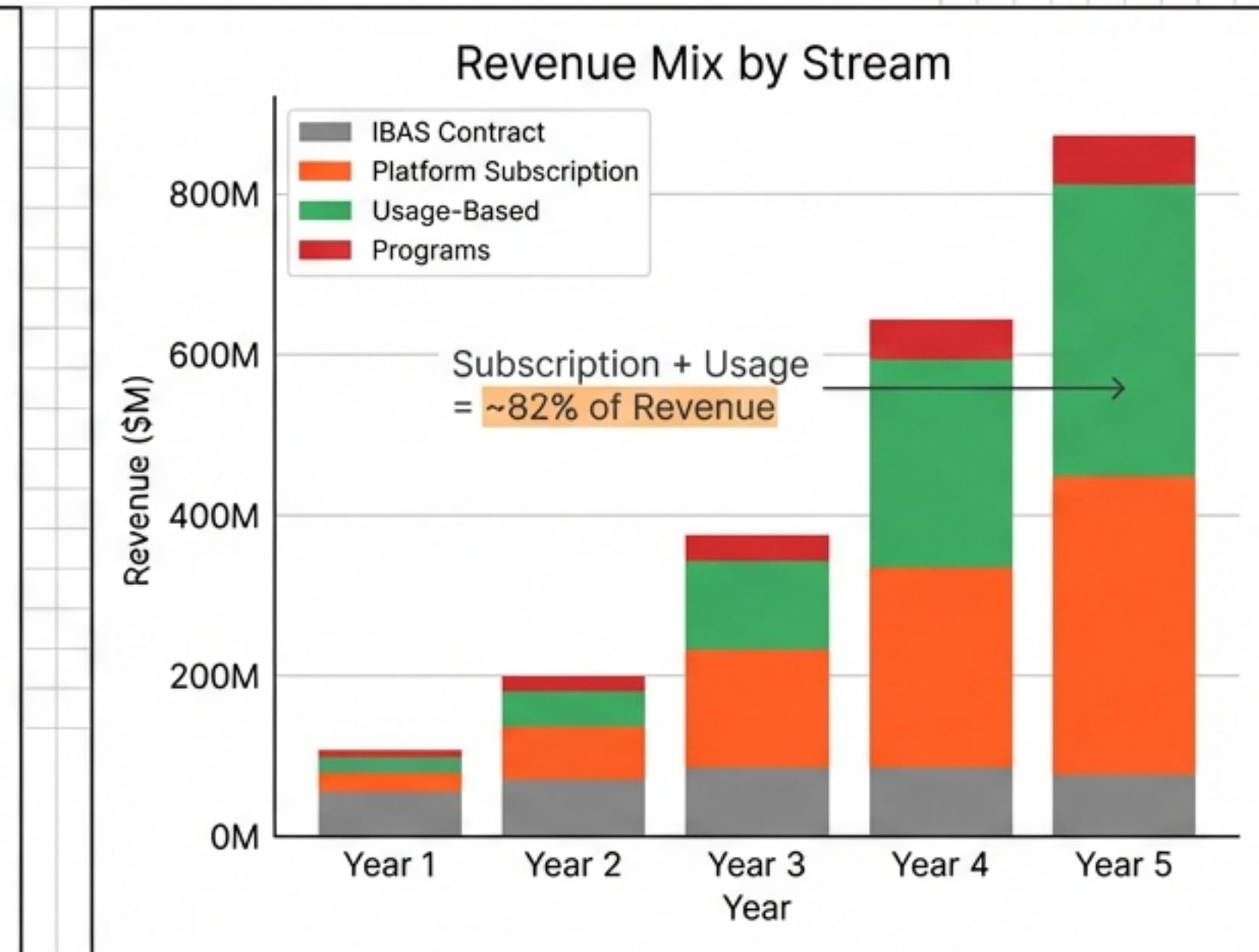
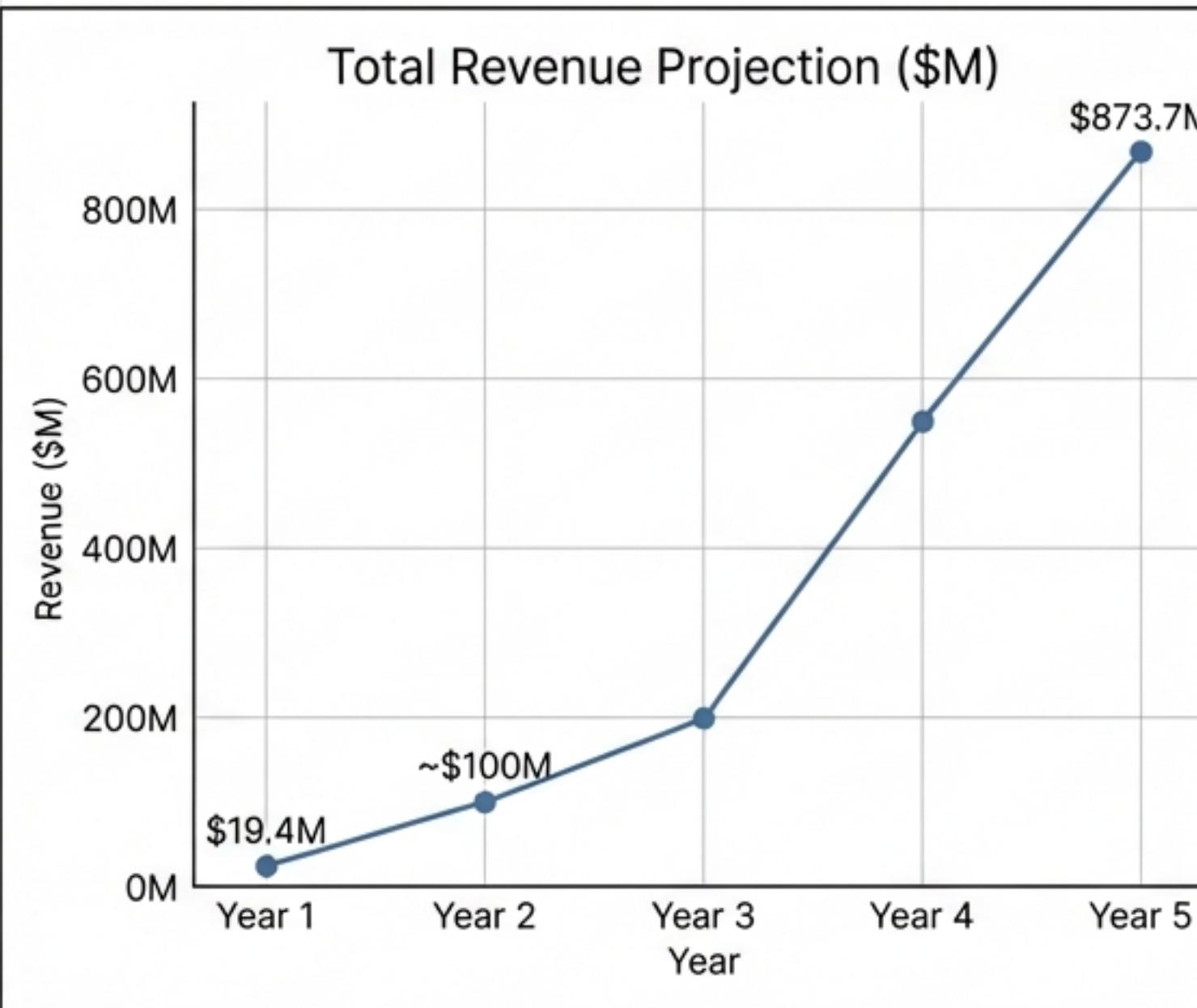
25% Annual Growth per Customer

## Operational Scale

**286**

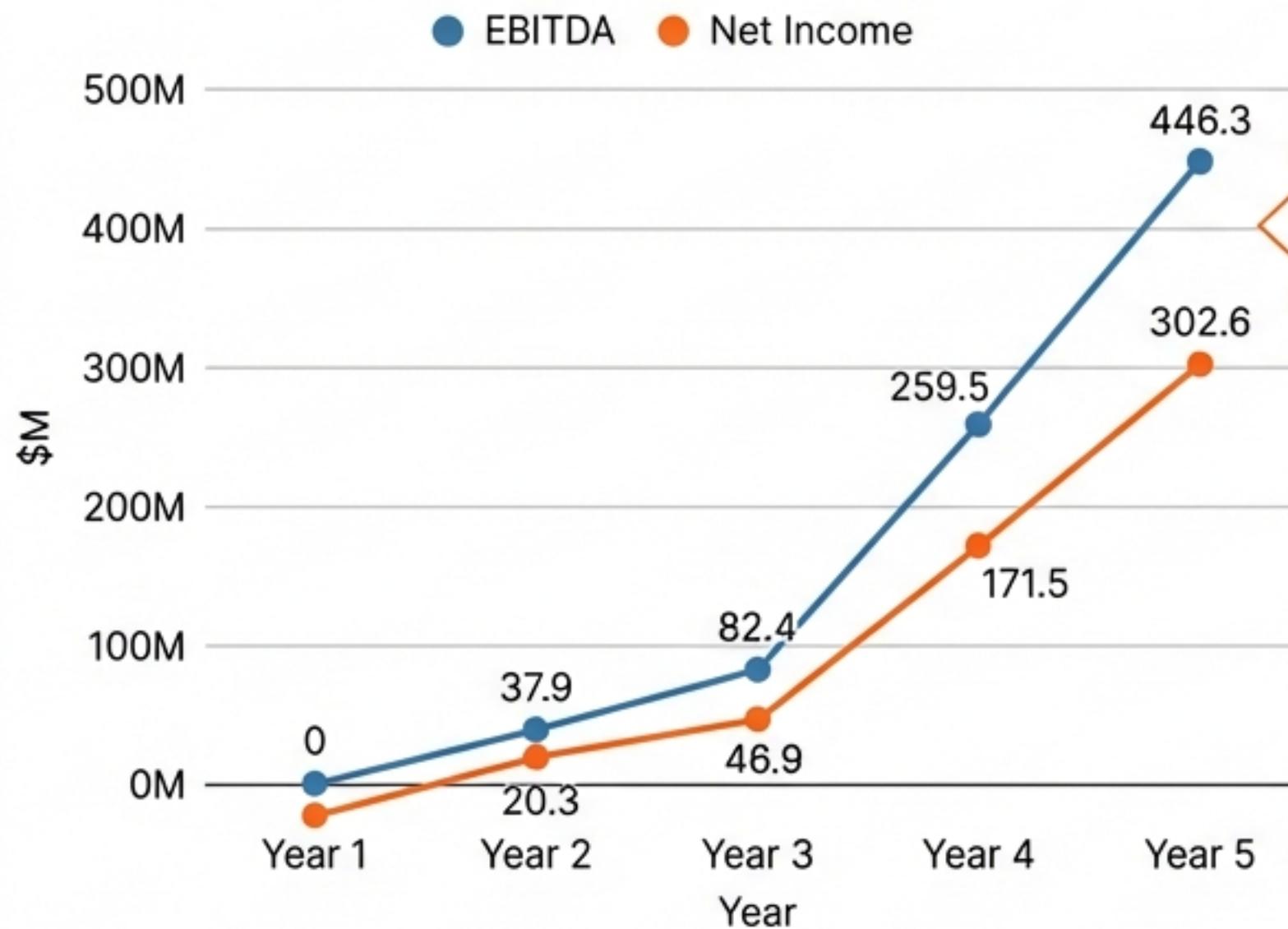
Headcount by Year 5 to support capacity

# Financial Trajectory: Rapid Scaling of Recurring Revenue

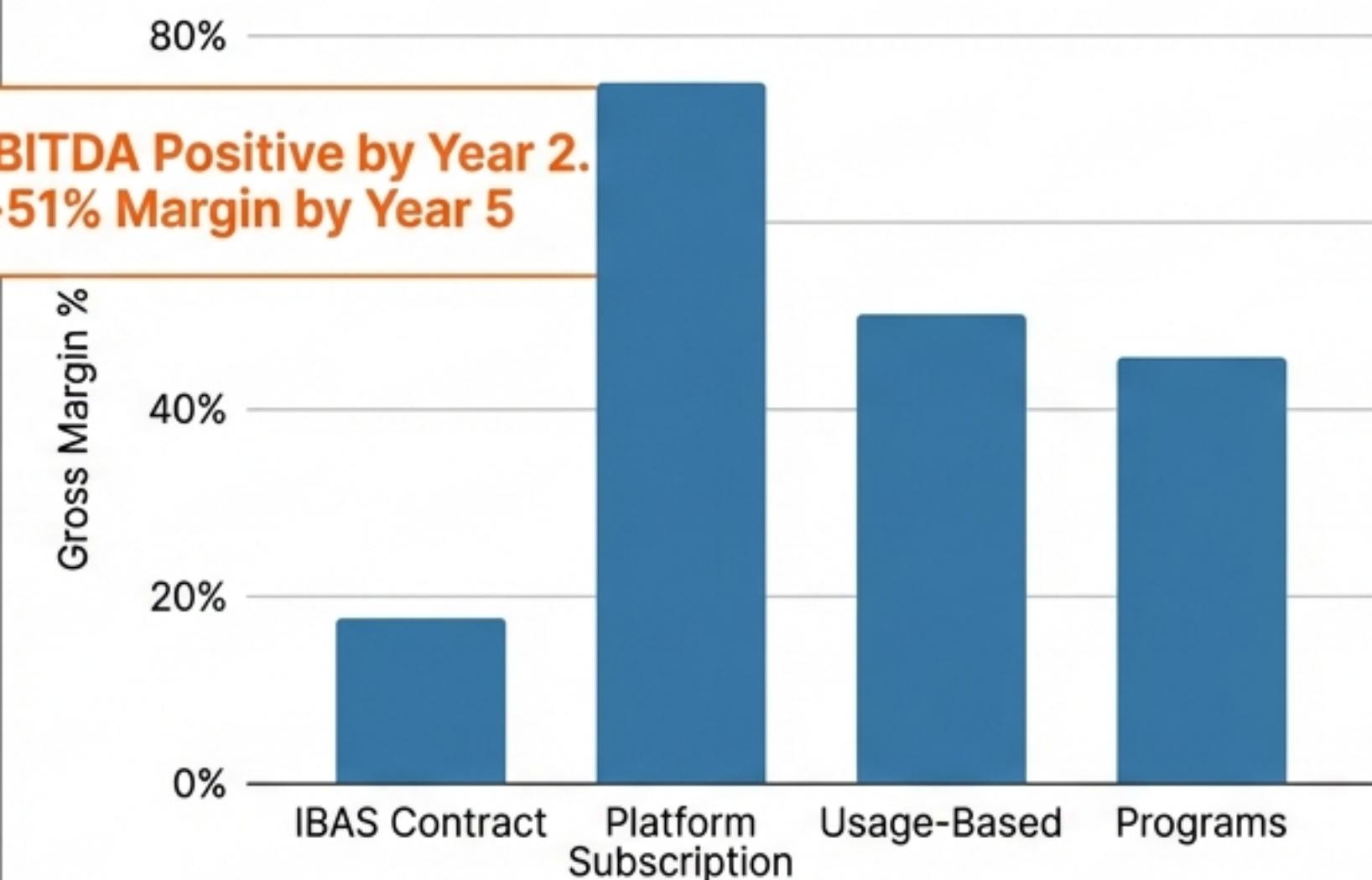


# Operating Leverage & Profitability

Profitability Projection (\$M)



Gross Margin by Stream (Year 5)



# The Ask & Use of Proceeds.

## Investment Focus

### CapEx Deployment

Deploying GPU clusters for ARCNet compute.  
Commissioning X160Pro manufacturing cells and regional fleets.

### Platform & Security

Enterprise security compliance for Defense readiness. Expansion of ARC OS architecture and Damara Tern integration.

### Go-to-Market Scale

Scaling sales team to convert program pipeline.  
Driving customer acquisition.

## Year 3/4 Milestones

- Subscription customer growth targets.
- Utilization targets for compute & manufacturing.
- Delivery of IBAS/Siemens qualification packages.

**Investing in the sovereign industrial base and the future of autonomous discovery.**