



# POV: Manufacturing of the Future

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**AMGEN**

# Today's Objectives



**Explore "Manufacturing of the Future" and Why It Matters to Amgen**

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**Highlight Amgen's Current Focus, Wins, and Lessons Learned**

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**Look Ahead at Future Trends and Technologies**

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# We are witnessing a transformation in manufacturing capabilities at a pace never seen before

## SMART FACTORY INVESTMENTS

**92%** of manufacturers agree smart manufacturing will be the main driver for competitiveness over the next three years

## ARTIFICIAL INTELLIGENCE FOUNDATIONS

**29%** of manufacturers are using AI/ML at the facility / network level  
**24%** have deployed GenAI

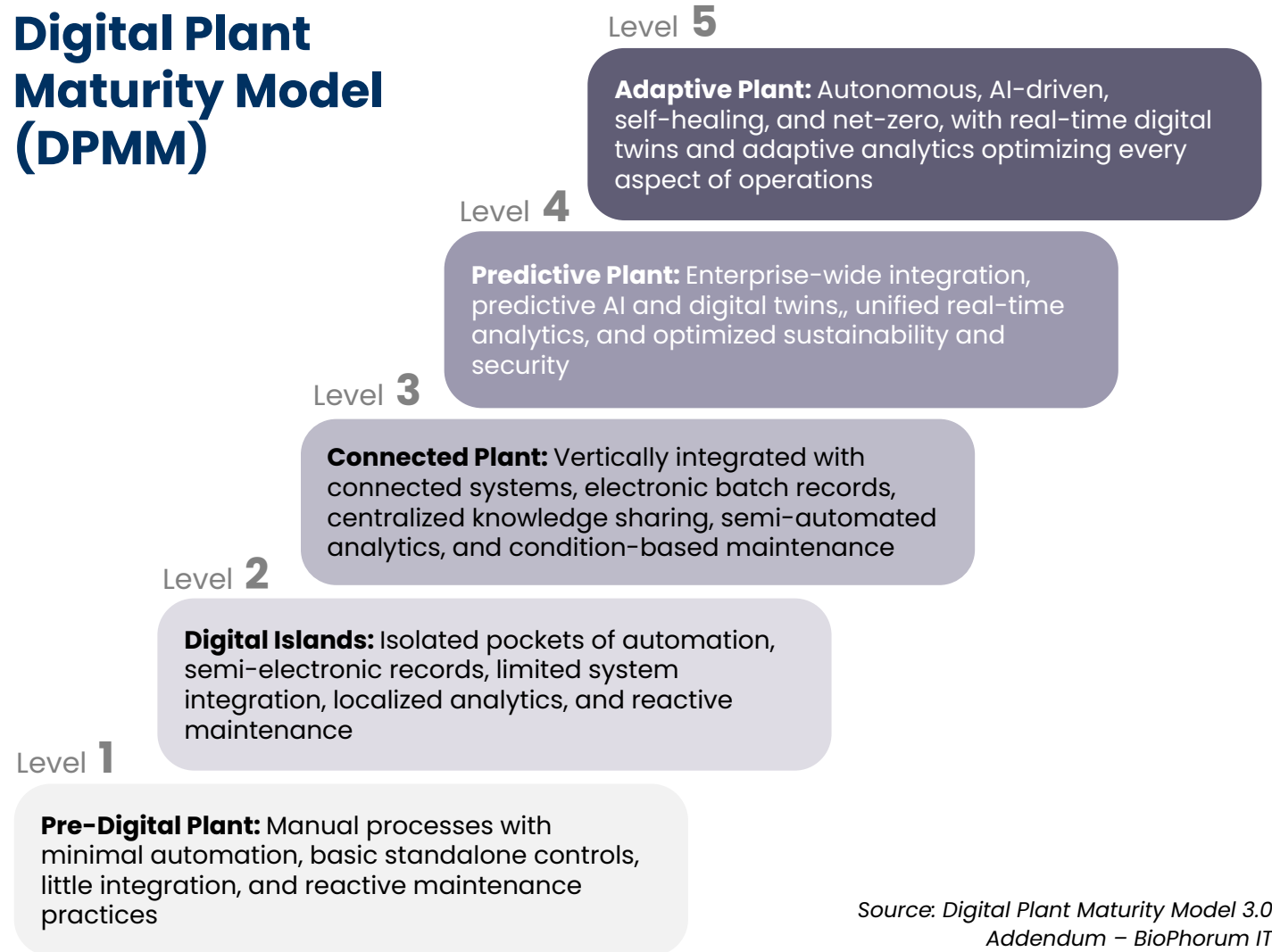
## DATA READINESS & CONNECTIVITY

**40%** of manufacturers are prioritizing investments in data analytics over the next 24 months

Source: [2025 Smart Manufacturing Survey – Deloitte Insights](#)

# The Digital Plant Maturity Model allows us to benchmark our Smart Factory maturity and set growth targets

## Digital Plant Maturity Model (DPMM)



Source: Digital Plant Maturity Model 3.0  
Addendum – BioPhorum IT

## AMGEN'S AMBITION

Advance **Smart Manufacturing capabilities** through:

- 1 Smart Factory 2.0**
- 2 AI-First by Design**
- 3 Workforce of the Future**

# Amgen's new Ohio facility demonstrates our commitment to future-proofing our manufacturing capabilities and workforce

## OUR BIG BETS



**Real-Time, End-to-End Automation**



**E2E Data Connectivity**



**Digital Control Tower**



**Predictive Maintenance via IIoT**



**AI Use Cases in Action**



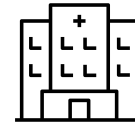
**Digital Twins for Virtual Commissioning**



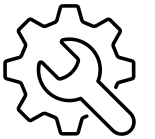
**Virtual Reality (VR) Training**

## TARGETED OUTCOMES IN OHIO

**26** months to build & license



**7** → **11** lines across two buildings



**40%** improvement in Overall Equipment Effectiveness (OEE)

**60%** productivity increase driven by automation, predictive analytics, and AI

Lot disposition cycle time reduced from **6 days** to **1 day**

**100%** electrified power



**fitwel**



# Looking ahead, we will continue to leverage learnings from our past to shape a stronger manufacturing future at Amgen

## LESSONS LEARNED

1

"DO NOW" VS.  
"DO LATER"  
DECISIONS

2

PRIORITIZATION  
OF EMERGING  
TECHNOLOGIES

3

MANUFACTURING  
SYSTEMS AS DATA

4

AGENTIC  
AI PILOTS

5

HUMAN-CENTERED  
UPSKILLING

We Aim to  
Deliver for  
Every Patient,  
Every Time

OUR MANUFACTURING

**AMGEN**

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