

# Scaling PLM Development & Rollout: Insights from our PLM Journey

# **MOOG**



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### Moog Inc.

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#### **Industrial Group**



Products, solutions and services to solve precision control challenges in applications such as:

- Industrial automation machinery
- · Energy, oil and gas
- Test and simulation
- Mobile
- Medical
- Marine
- Technology focused sports
- Autonomous robotics

#### **Space and Defense Group**



- · Motion and fluid control solutions for launch vehicles, spacecraft, and human exploration
- Spacecraft avionics and payload electronics
- Precision motion control for military ground vehicles, naval ships and missiles
- · Weaponization of air, land and sea platforms







- · Integrated flight control systems
- · Critical control applications and products
- Platform integration
- Manufacturing
- · Aftermarket services
- Avionics





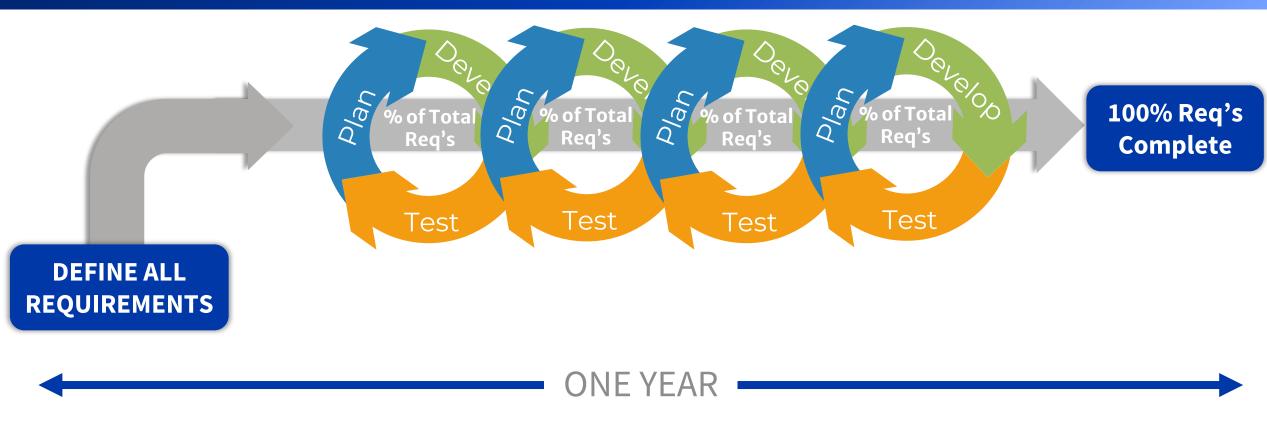






### **History: 2017 Project Management**

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What if we Miss a Requirement?
What if Business Needs Change after Requirements are Locked?





### History: 2018 A Case for Change

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### Objectives for Continuous Improvement

- 1. Fast Feedback from the Business
- 2. Incremental Business Value Delivery
- 3. Scalability, Adaptability & Sustainability
- 4. Good fit with Moog Culture & Corp Objectives

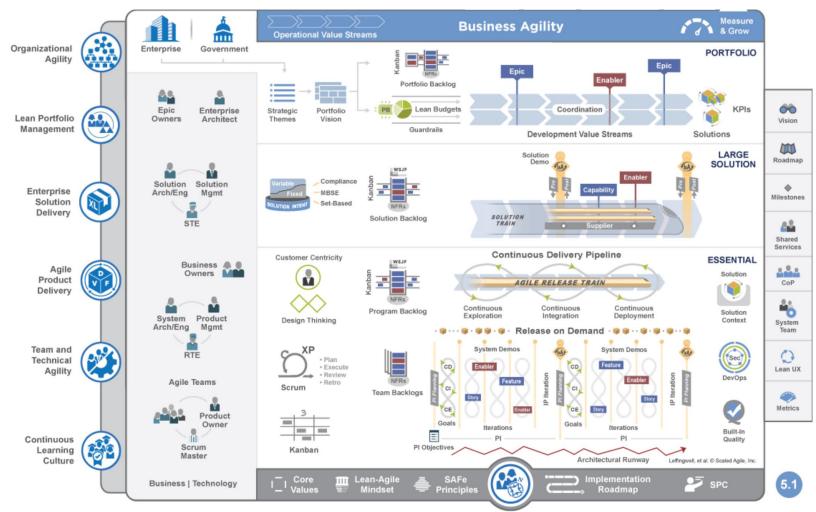


### Scaled Agile Framework® (SAFe®) met our Objectives

### Brief Summary: Scaled Agile Framework® (SAFe®)

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- Scrum
- Agile Teams
- Agile Release Train (ART)
- Program Increments





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Lean-Agile Leadership

### **History: Humble Beginnings**

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Introduce SAFe®

#### Trained Staff in SAFe®

Large team divided by disciplines and skills

#### **Adopt Agile Tool**

Requirements imported into an agile tool as a large backlog

## Adopt Program Increments

- Adopt SAFe® program increments
- Struggled with SAFe® process rigor

#### **Constant Change**

Without a compass the team used interpretation and theoretical knowledge to guide

#### **Change Fatigue**

Lack of role clarity and clear direction eroded team communications & led to process ambiguity & team confidence challenges

#### **Time to Rethink**

- Increase team confidence
  - Eliminate ambiguity
- Improve communications
  - Increase predictability
    - Update the vision



### 2021 Program Relaunch

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#### **Leadership Support:**

Strategic Alignment from top down



#### SAFe® Coach:

Reviewed Options
Selected Agile Rising



#### **Program Culture:**

SAFe® is Cultural Implementation

Branded as "Re-Launch"



#### **Strategic Approach Change:**

Aggregation of Marginal Gains
Team Directed Decision Making



#### **Roadmaps Defined:**

Program Roadmap
Team Maturity Roadmap
Development Roadmap

### **Team Maturity Roadmap**

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"Coming together is a beginning, staying together is progress, and working together is success." - Henry Ford



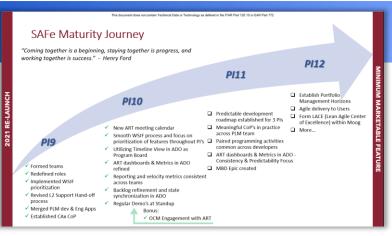
#### **Improve Fundamentals**

- · Formed small teams
- Redefined roles
- Implemented WSJF prioritization
- Process flow improvements
- Introduce CoP's

### Accelerate

- Refined ART organization
- Cleaned and relaunched Agile Tool for ART
- ART Metrics & Dashboards
- Backlog refinement
- Regular Demo's
- Risk management improvements

- More CoP's
- 3 PI, Predictable Dev Roadmap
- Paired programming
- Expanded Epics
- Team Consistency focus



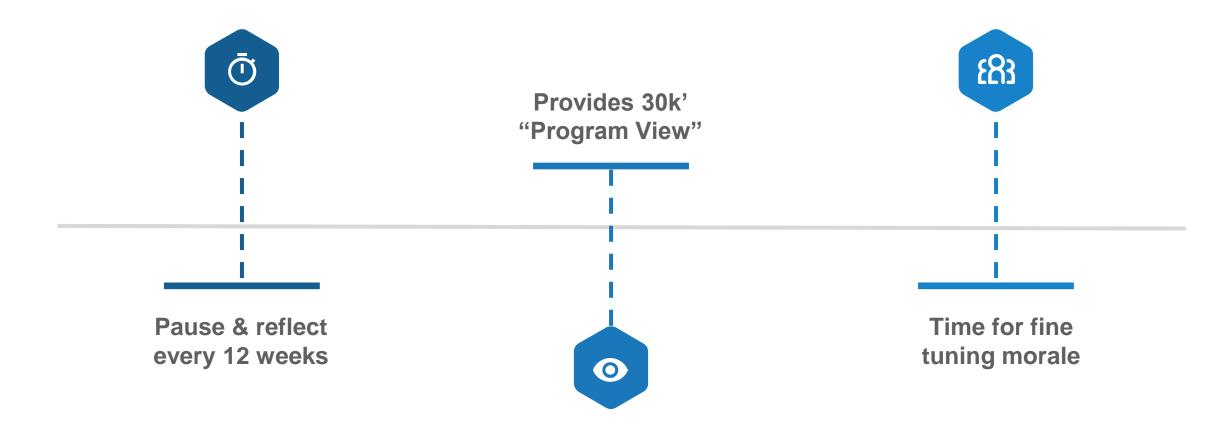
\*Example

Show Your People Where They are on Their Adoption Journey

### Pl Planning, It's Not Just Planning

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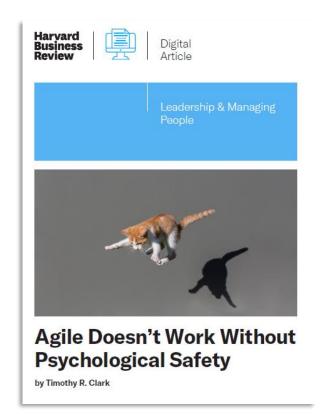
"In leadership you're always looking for organic teachable moments. PI's bake that opportunity in every 12 weeks."



### Individuals and Interactions Over Processes and Tools

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- Psychological Safety: #1 indicator of team effectiveness
- Functional Hierarchy
  - Titles Matter to People
- Project Roles
  - What are FO's and SO's?
  - Make Role Titles your own



"SAFe® is a Cultural Implementation"

Unlock Innovation
Empower Your People & Let Them Lead



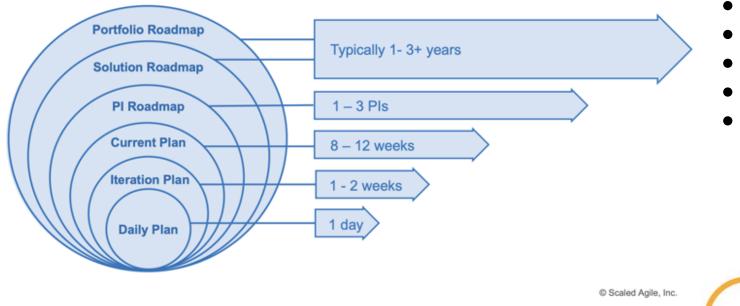
### **Visions and Roadmaps**

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Less

detail

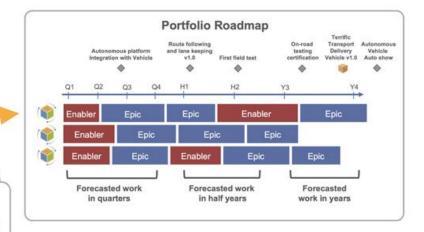
detail



Improve your organization at a sustainable pace.

Watch for transformation fatigue!

- Build a vision and roadmap
- Refine requirements just in time
- Greater detail for near term
- Directional for long term
- Allows for new information and pivots



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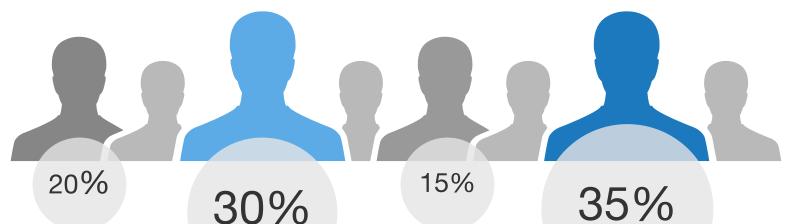
### **Build a Vision for the Solution AND the Improved Organization!**

Solution Roadmap



### Release Train Engineer (RTE) – the Sustaining Coach

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#### Sees Big Picture

Focusses their leadership on Outcomes

#### Coaching/Mentoring Mindset

Listen, understand, encourage, motivate, think, coordinate, drive, facilitate

### Knowledge

Worker

Individuals who think for a living.

Focused on quality over quantity.

Understands spirit of the role

#### People Smart

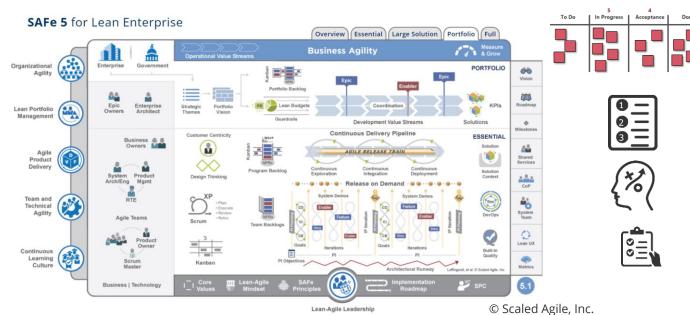
Capacity & ability to recognize & assess various points of view without bias.

A Servant Leader for the ART – Choose Wisely

### SAFe®: A Framework, not a Methodology

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- Like a giant toolbox
- Use what makes sense
- Add in practices over time as needed



We found value in:

- Scrum & 2-week sprints
- PI Planning
- Visualizing all work
- Force ranked prioritization
- Retrospectives
- User Stories & Features & Epics

Use only what you need and base changes on core principles

### **Our Next Steps**

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- Supporting our RTE with mentorship from Agile Rising
- Continual training & education:
  - Targeted training individuals, new hires, new teams, refreshers, etc.
- More Scale SAFe® in more departments and at higher levels
- Multi-year and multi-quarter roadmaps for next 10 years of innovation
- Transition to a PLM Sustaining organization
- Move towards Lean Portfolio Management

### **Summary**

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#### Remember:

- Individuals and interactions over processes and tools
- Leaders lead the way
- SAFe® is a framework make it your own
- Revise and re-plan on a cadence

### Have a Plan:

- People and culture first
- Kickstart your journey with a coach
- Roadmap your ART's maturity create a chain of successes
- Incrementally increase scope with maturity
- Increase scale to return more value
- Keep improving

### Let's continue the conversation

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- Come find us; let's continue the conversation!
- We'd love to hear your experiences and lessons learned
- Reach out Stay in touch:

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