Accelerating the Flow of Customer Value

The 8 Flow Accelerators

SAFe® SUMMIT
DENVER, COLORADO

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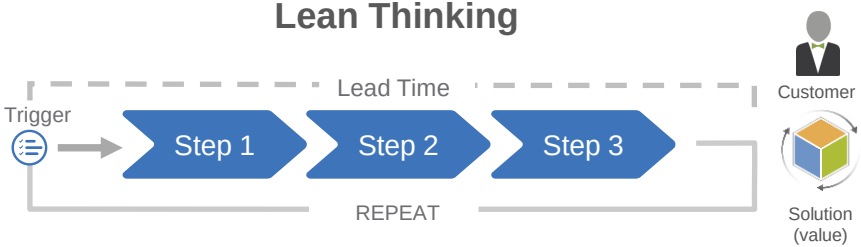
SAFe Lean-Agile Mindset

Lean Thinking



Principles of Lean Thinking

1. Precisely specify value by product
2. Identify the Value Stream for each product
3. Make value flow without interruptions
4. Let the Customer pull value from the producer
5. Pursue perfection

Agile Values

We are uncovering better ways of developing software by doing it and helping others do it.

Through this work we have come to value:

Individuals and interactions over processes and tools

Working software over comprehensive documentation

Customer collaboration over contract negotiation

Responding to change over following a plan

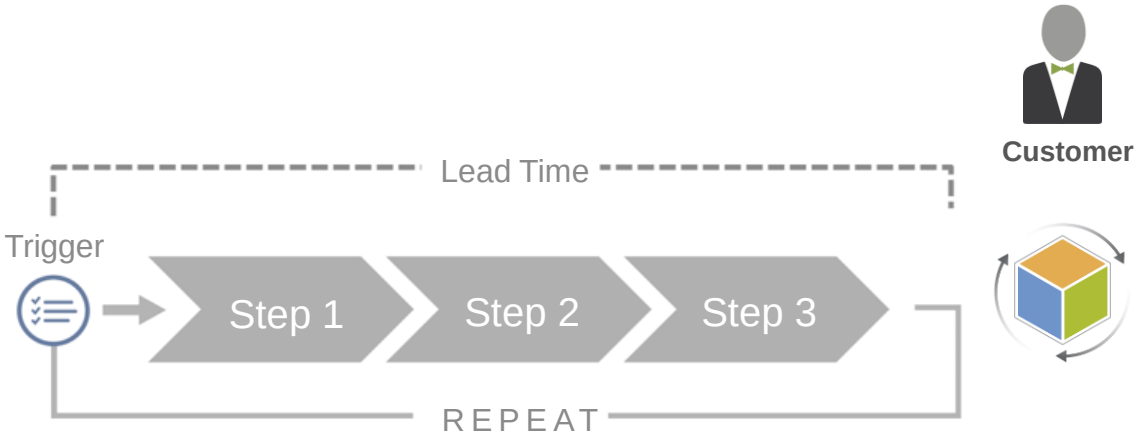
That is, while there is value in the items on the right, we value the items on the left more.

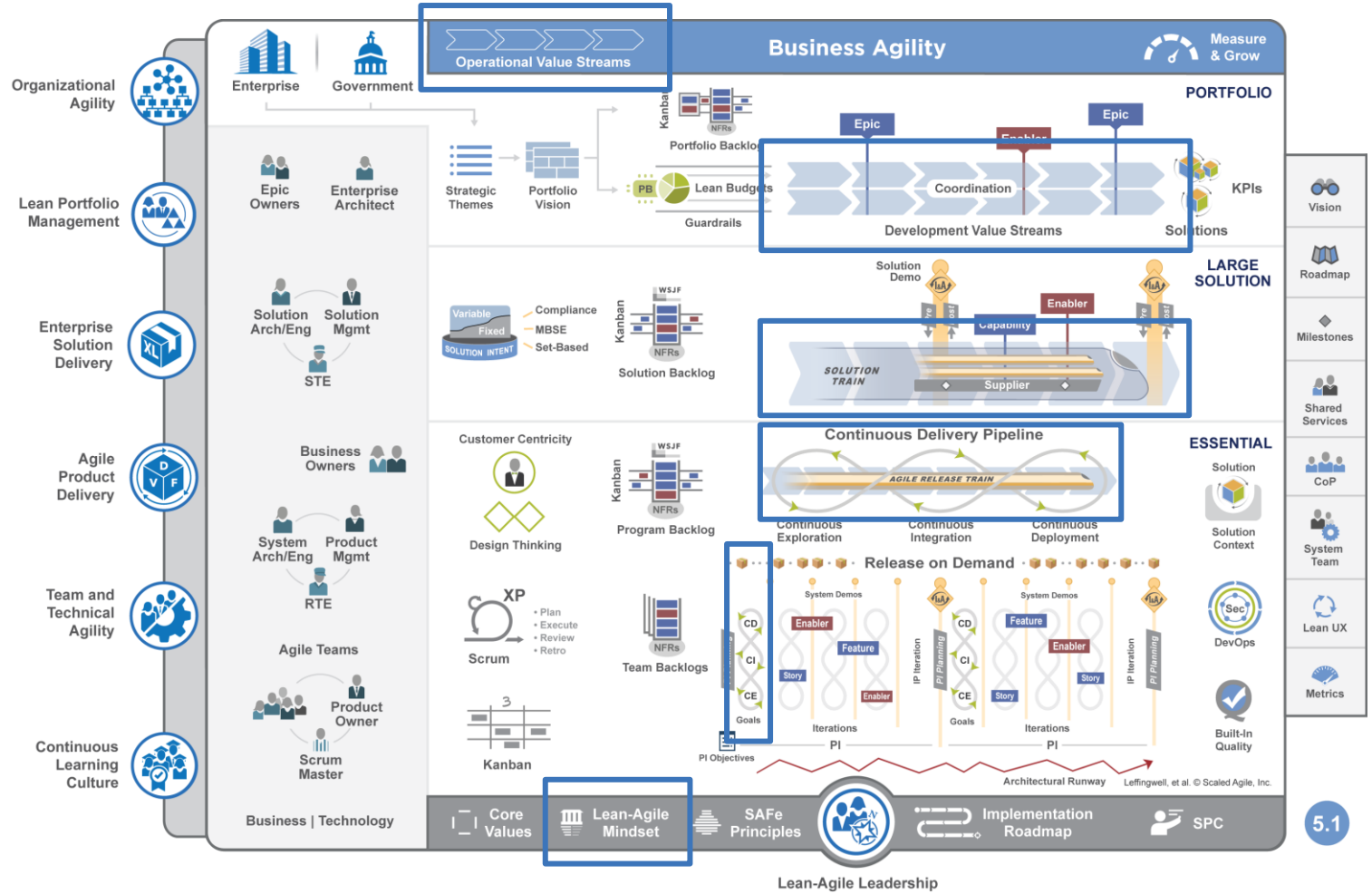
agilemanifesto.org

Lean Thinking

- ✓ Precisely specify value by product
- ✓ Identify the Value Stream for each product
- ✓ Make value flow without interruptions
- ✓ Let the Customer pull value from the producer
- ✓ Pursue perfection

Lean Thinking: Banish Waste and Create Wealth in your Corporation, James Womack and Daniel Jones




Organizational Agility
Lean Portfolio Management
Enterprise Solution Delivery
Agile Product Delivery
Team and Technical Agility
Continuous Learning Culture
Enterprise
Government
Operational Value Streams
Business Agility
Measure & Grow
PORTFOLIO
Epic Owners
Enterprise Architect
Strategic Themes
Portfolio Vision
Kanban
NFRs
Portfolio Backlog
PB
Lean Budgets
Guardrails
Epic
Enabler
Epic
Coordination
KPIs
Development Value Streams
Solutions
LARGE SOLUTION
Solution Arch/Eng
Solution Mgmt
STE
Variable
Fixed
SOLUTION INTENT
Compliance
MBSE
Set-Based
WSJF
Kanban
NFRs
Solution Backlog
Solution Demo
Enabler
Capability
SOLUTION TRAIN
Supplier
Business Owners
Customer Centricity
Design Thinking
Continuous Delivery Pipeline
AGILE RELEASE TRAIN
Continuous Exploration
Continuous Integration
Continuous Deployment
ESSENTIAL
Solution
Solution Context
System Arch/Eng
Product Mgmt
RTE
Program Backlog
Release on Demand
System Demos
Enabler
Feature
Story
CD
CI
CE
Goals
IP Iteration
PI Planning
Iterations
PI
PI Objectives
Architectural Runway
DevOps
Built-In Quality
Agile Teams
XP
Plan
Execute
Review
Retro
Scrum
Team Backlogs
Product Owner
Scrum Master
Kanban
Business | Technology
Core Values
Lean-Agile Mindset
SAFe Principles
Implementation Roadmap
SPC
Lean-Agile Leadership
Vision
Roadmap
Milestones
Shared Services
CoP
System Team
Lean UX
Metrics
5.1
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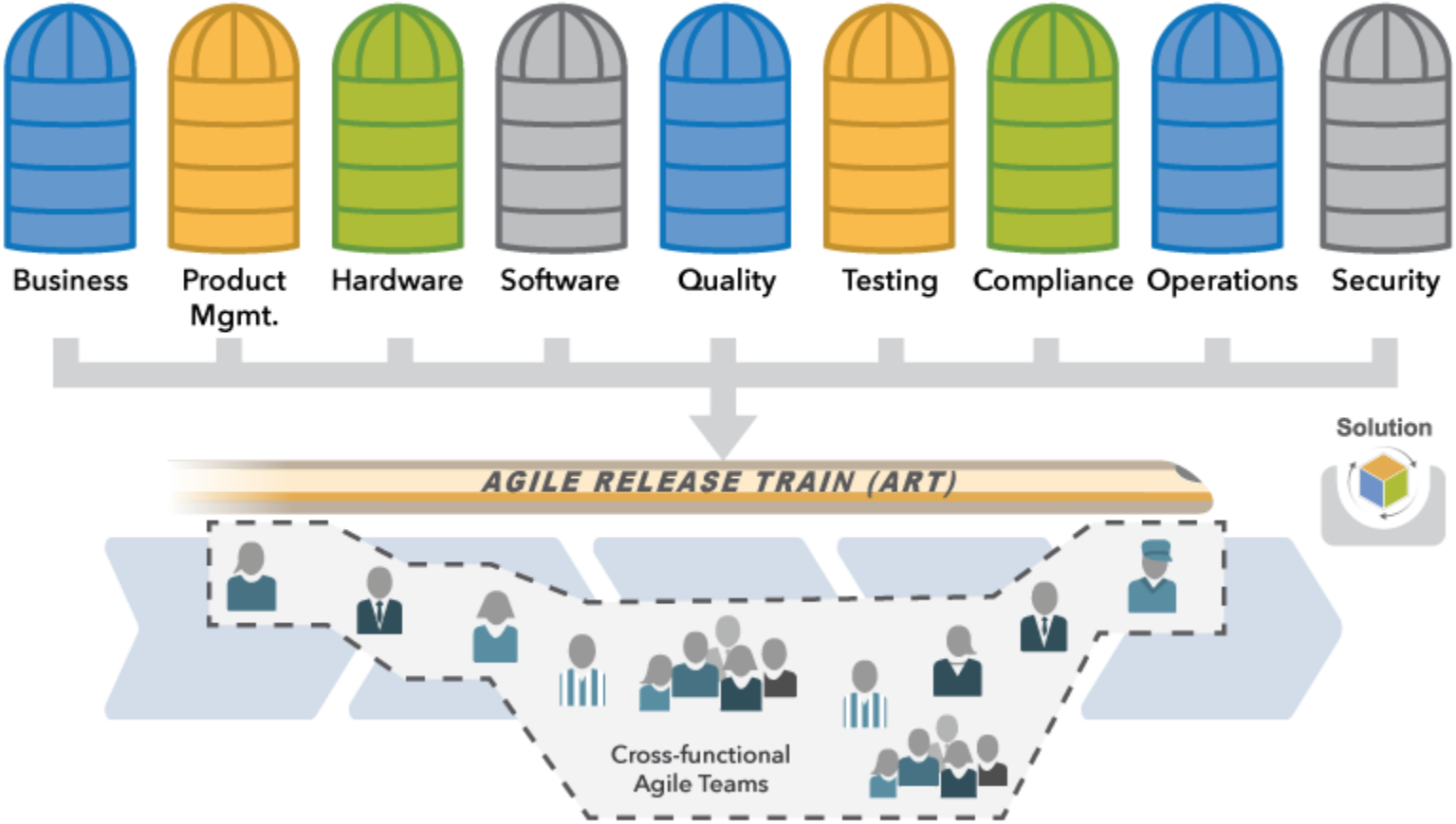
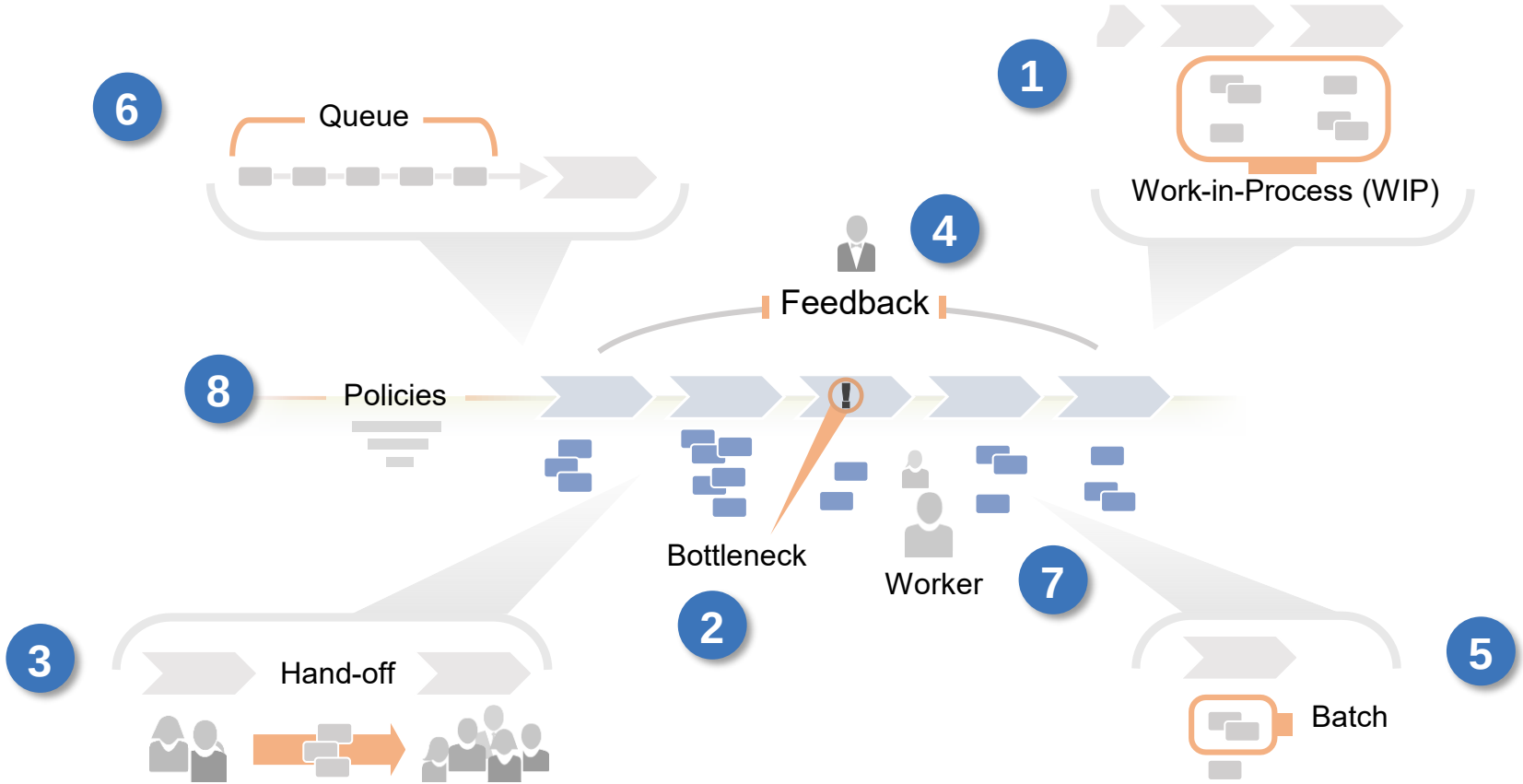


Improving Flow with the 8 Flow Accelerators

8 elements of all flow-based systems



Improving flow with the *8 Flow Accelerators*

1. Visualize and Limit WIP
2. Address Bottlenecks
3. Minimize Handoffs and Dependencies
4. Get Faster Feedback
5. Work in Smaller Batches
6. Reduce Queue Length
7. Optimize Time ‘In the Zone’
8. Remediate Legacy Policies and Practices

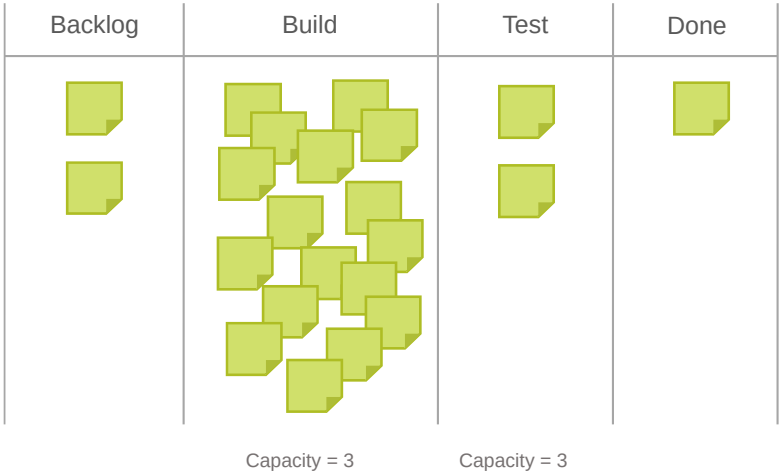
https://www.scaledagileframework.com/accelerating-flow-with-safe/

#1. Visualize and Limit WIP

Why it matters?

Excessive WIP

- decreases team productivity
- confuses priorities
- increases context switching
- impedes the flow of value



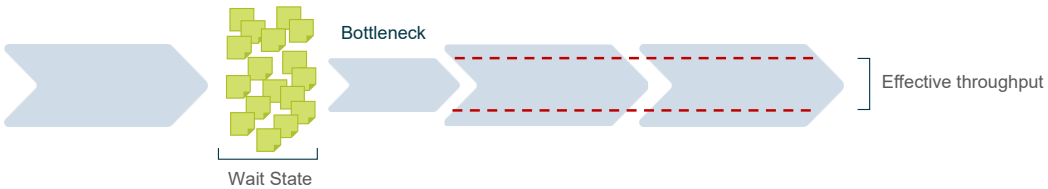
What to do about it?

- **Make the current WIP visible.** All work must be captured in the team's backlog and made visible in a Kanban System.
- **Set WIP limits** to balance WIP against available capacity

#2. Address Bottlenecks

Why it matters?

Team productivity is constrained by bottlenecks and the system cannot meet the demand placed upon it.



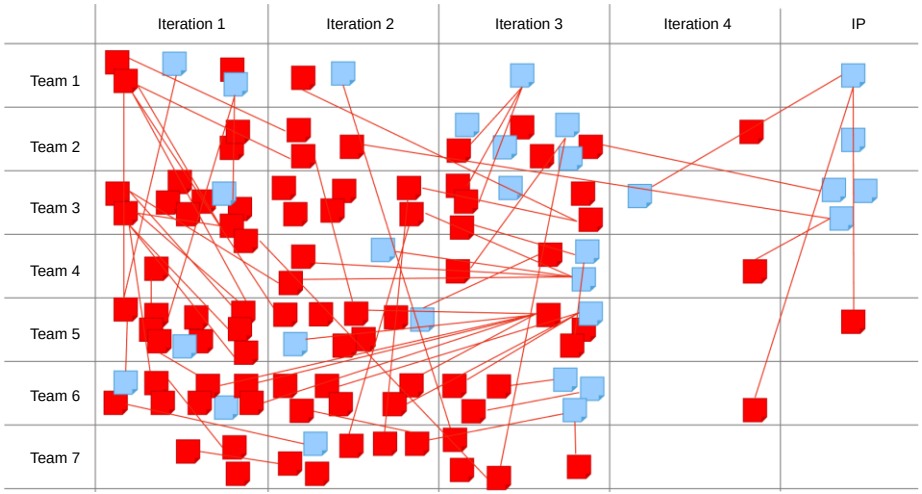
What to do about it?

- **Start by identifying bottlenecks**:
  - An insufficient number of people with a given expertise
  - Overspecialization
  - Poor team discipline
  - Excessive technical debt
  - Lack of availability of a shared service
  - Lack of customer feedback
- **Increase capacity at the bottleneck** by applying Built in Quality and other Agile practices, or
- **Bypass the bottleneck** with selective replanning

#3. Minimize Handoffs and Dependencies

Why it matters?

Excessive dependencies and handoffs are disruptive to team flow and may quickly create excessive context switching and overhead.



What to do about it?

- **Organize around value** by applying effective team topologies to help manage the cognitive load placed on the team.
- **Make handoffs and dependencies visible** to understand the pattern in which they occur and the impact they create.
- **Take corrective action** by changing the process, the design of the system, the individual work product, or the teams themselves.

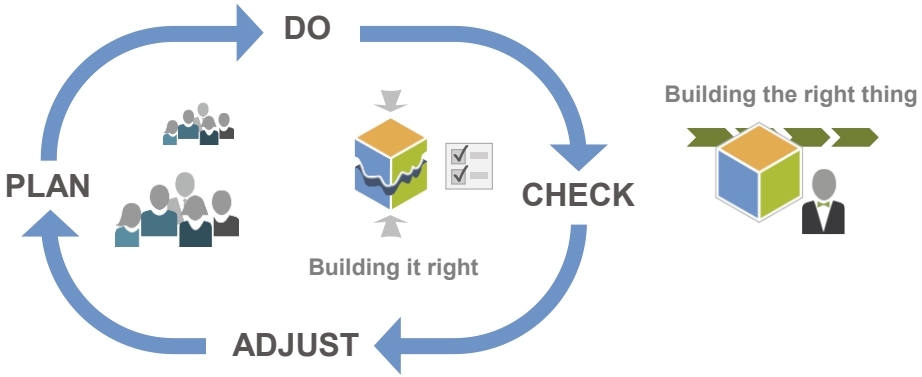
#4. Get Faster Feedback

Why it matters?

When feedback is missing or delayed, misunderstandings accumulate leading to rework, slow delivery and dissatisfied customers.

What to do about it?

- **Determine what types of feedback are missing or inadequate.** Different forms of feedback provide answers to different questions.
- **Shift reviews left.** Don't wait until the work is complete to get it peer reviewed.
- **Demonstrate working systems** and create a discipline of empirically validating core assumptions every step of the way.



#5. Work in Smaller Batches

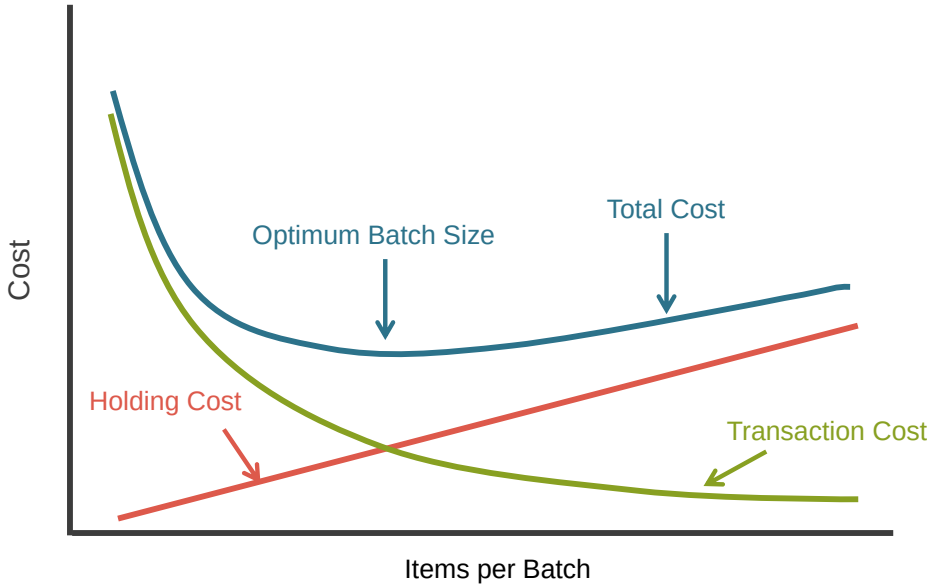
Why it matters?

Operating in large batches leads to

- delayed feedback
- significant rework
- high variability.

What to do about it?

- **Use the recommended cadence and team** size to keep batch size small: PIs and Iterations, and Teams and ARTs.
- **Adjust the process to support smaller batches.** Changes may be required to planning and execution.
- **Automate where possible** by planning and delivering certain enabler work.



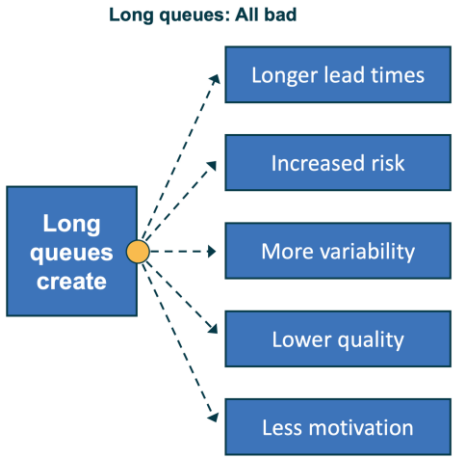
#6. Reduce Queue Length

Why it matters?

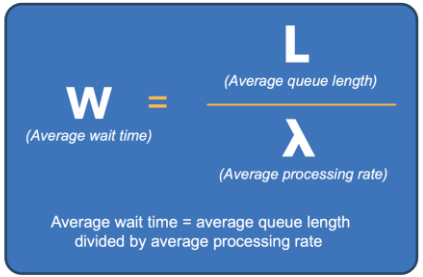
Queues represent committed work. The longer the queue the longer the wait time for new functionality to be delivered to the customer.

What to do about it?

- **Focus on the committed PI Objectives** to avoid commitments beyond that timebox, and a queue for new work that is not much longer than a PI.
- **Work in iterations** to bring focus to those items that must be completed immediately.
- **Ensure all work goes through the backlog** to avoid the accidental creation of a longer, informal queue.



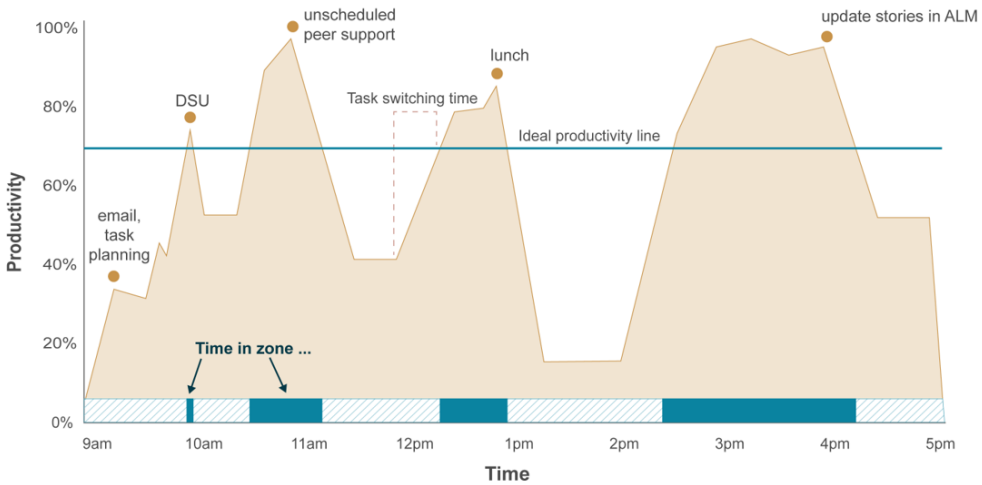
Principles of Product Development Flow, Don Reinertsen



#7. Optimize Time ‘In the Zone’

Why it matters?

People and teams in the zone demonstrate high levels of creativity, productivity, happiness, and fulfilment.



2.4 hrs (time in zone) / **8 hrs** (full day) = **30%** of work day spent **in zone**

What to do about it?

- **Optimize meetings and events** and question the efficiency of all meetings.
- **Keep work-in-process low** to reduce context-switching.
- **Use productive collaboration patterns** like pair work and mob programming
- **Maintain work product health** to ensure it doesn’t become harder to maintain the system

#8. Remediate Legacy Policies and Practices

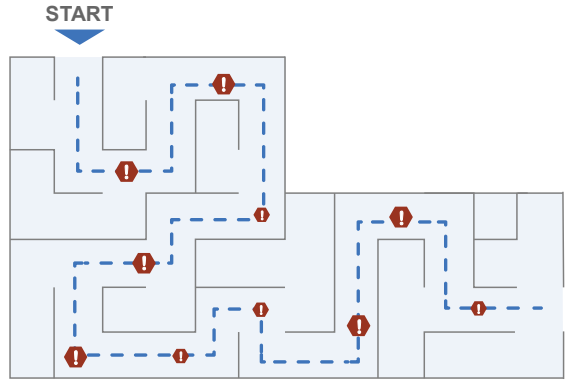
Why it matters?

Old and New practices can't simply be added as part of a transformation. Some are mutually exclusive; some are directly counterproductive, and some just drive overhead

What to do about it?

Leaders must constantly be on the lookout for impediments to flow e.g.

- Keeping manual status reporting in place
- Maintaining old time sheets
- Mandating practices like documenting design decisions
- Forcing documentation on every defect
- Mandating traceability of non-critical code
- Separating developers and testers to achieve 'separation of quality concerns'

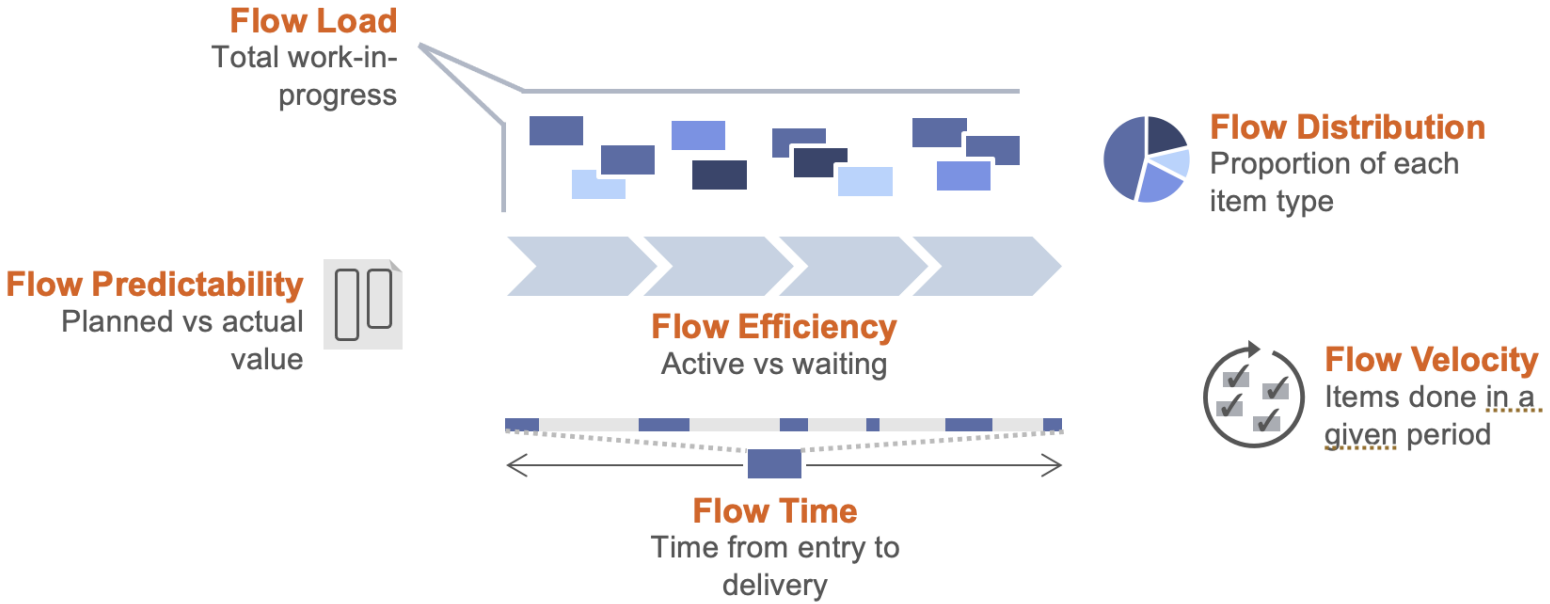


- Extraneous meetings
- Extra reporting
- Timesheet reporting
- Legacy CCB
- Waterfall Quality Management System
- Waterfall mindset
- Iron Triangle
- Stage-gate milestones
- Legacy compensation
- Obsolete standards

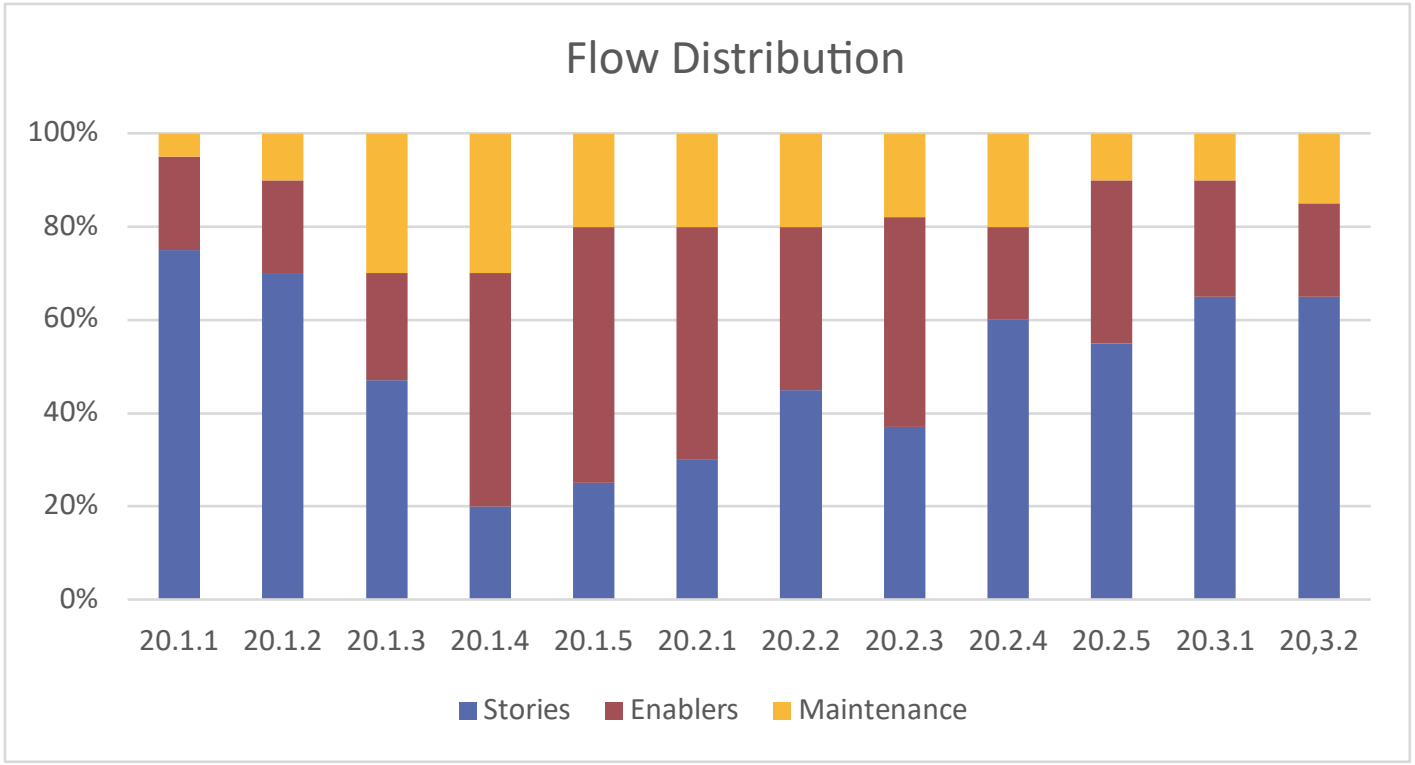
Diagnosing Problems with Flow

Apply the 6 Flow Metrics to diagnose problems

The only way to assess the efficacy of the previous fundamentals is to measure how efficiently the organization continuously delivers a flow of value. SAFe describes six key flow metrics —flow *distribution, velocity, time, load, efficiency, predictability*—that measure different aspects of flow.

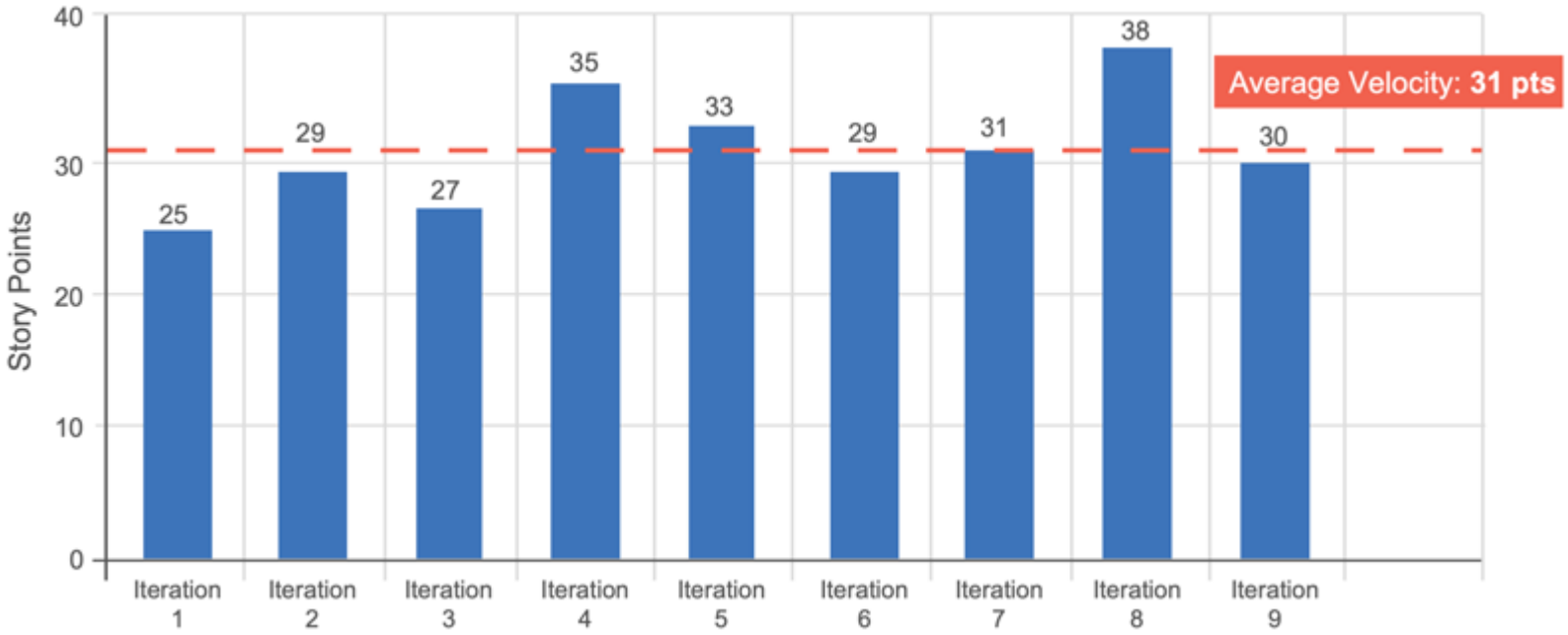


Measuring Team Flow - Flow Distribution



Flow Metric	Problems Surfaced	Flow Accelerator to Remediate
Flow Distribution – The portion of each backlog item type	Too much focus on business features leading to solution health degradation, slowing development.	4. Get faster feedback 6. Reduce queue length
Flow Velocity – number of items completed in a given time	• Underlying problems with productivity. • Unpredictable velocity from one time period to the next.	5. Work in smaller batches 7. Optimize 'time in zone'
Flow Time – Time work spends in the workflow.	Slow time to market causing customer to wait and incurring a cost of delay.	3. Minimize handoffs and dependencies 5. Work in smaller batches 6. Reduce queue length 8. Remediate Legacy Policies and Practices
Flow Load – total work in process	Excess work in process leading to increased flow time as queues build up in the system.	1. Visualize and limit WIP 6. Reduce queue length
Flow Efficiency – ratio of active time to total time	Large amounts of waste in the system along with bottlenecks and delays that need addressing.	2. Address bottlenecks 3. Minimize handoffs and dependencies 5. Work in smaller batches 8. Remediate Legacy Policies and Practices
Flow predictability – planed vs. actual business value delivered	Low or erratic predictability highlights underlying problems in technology, planning, or organization performance that need addressing.	4. Get faster feedback 5. Work in smaller batches

Measuring Team Flow - Flow Velocity



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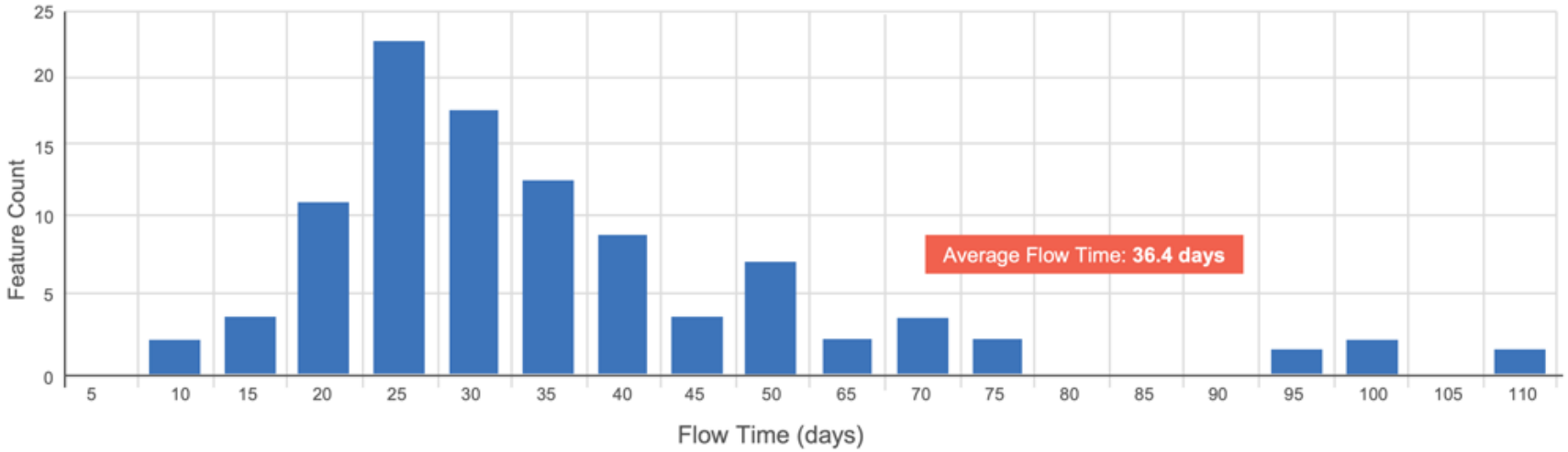
Measuring ART Flow – Flow Time



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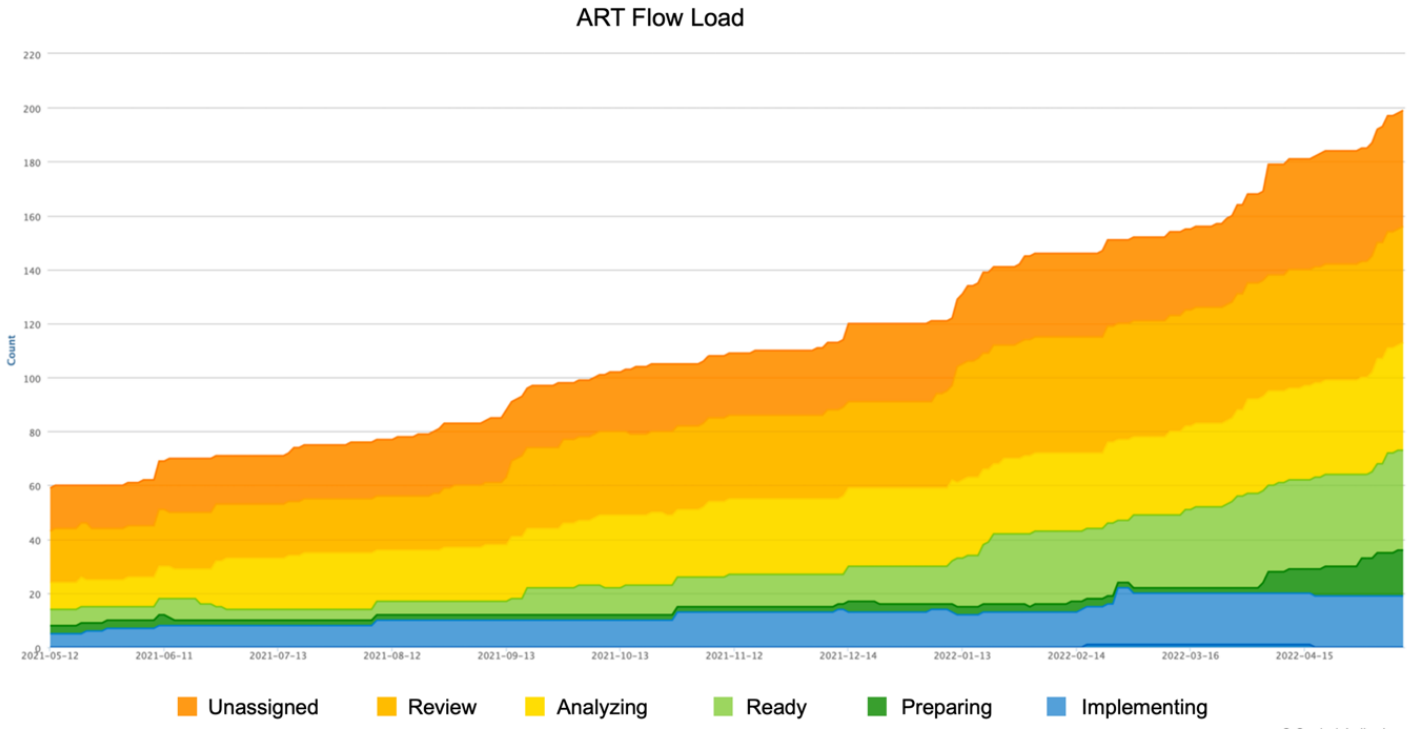
Measuring ART Flow – Flow Load



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Measuring ART Flow – Flow Efficiency

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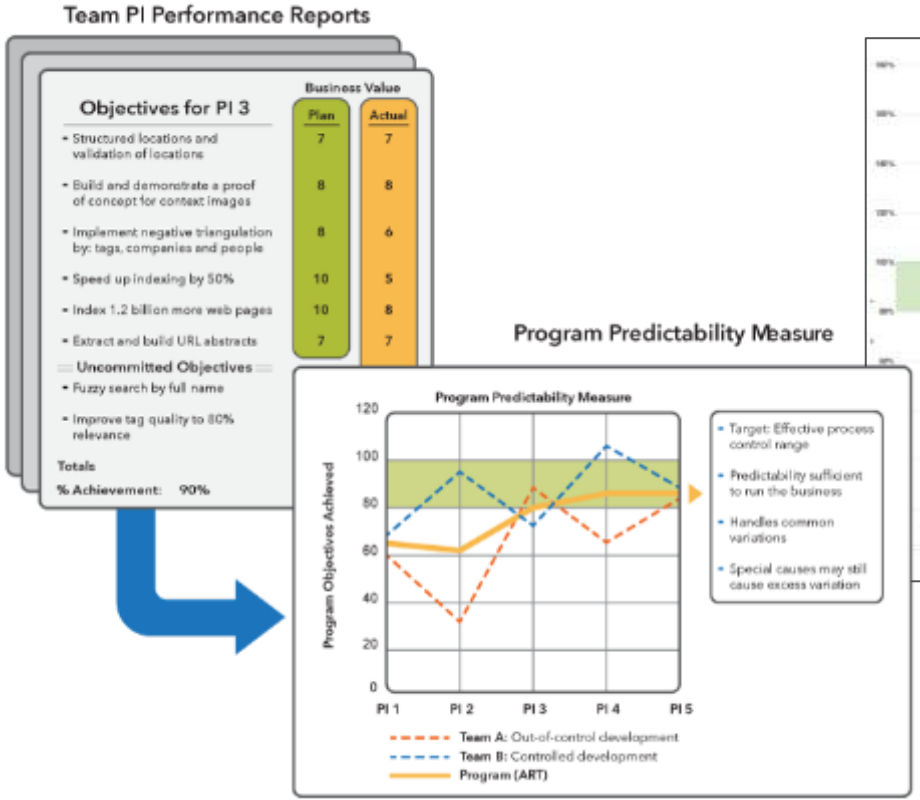
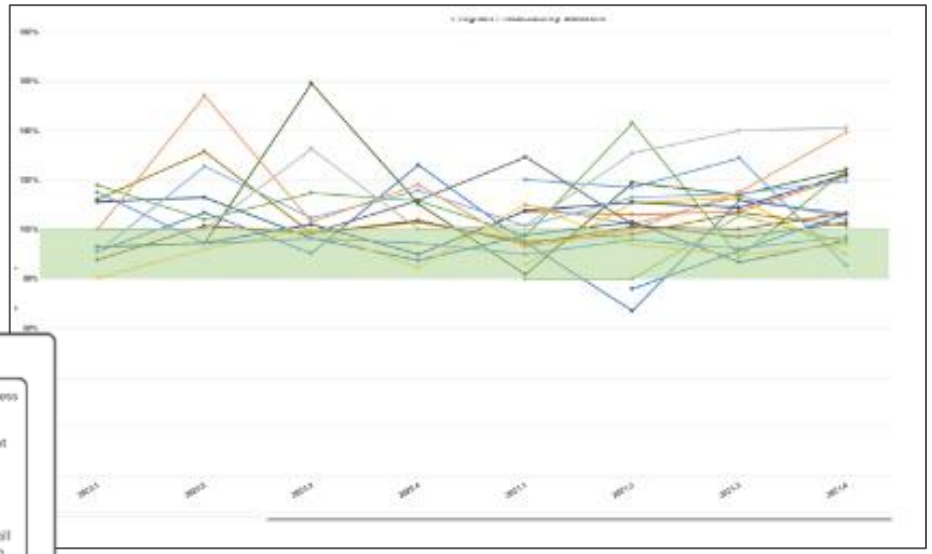
Measuring ART Flow – Flow Predictability





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Next steps

- **Read the new extended guidance articles**
  - Value Stream Management
  - Accelerating Flow with SAFe
  - Make Value Flow without Interruptions

- **Apply the flow accelerators to find the interruptions in your context**

- **Contribute to the learnings:**
  Join the forum, **Accelerating Flow with SAFe**
  in the SAFe Community Platform

Thank you!