Agile 101
for the Lean Practitioner

Jake Mitchell
Supervisor, IT Project Management Office
Eastman Chemical Company

EASTMAN

Fibers
Additives & Functional Products
Advanced Materials
Chemical Intermediates

What do I want you to know?

1. Agile has history
2. Agile is Lean
3. Agile has many approaches
4. Agility should matter to you

SELFI

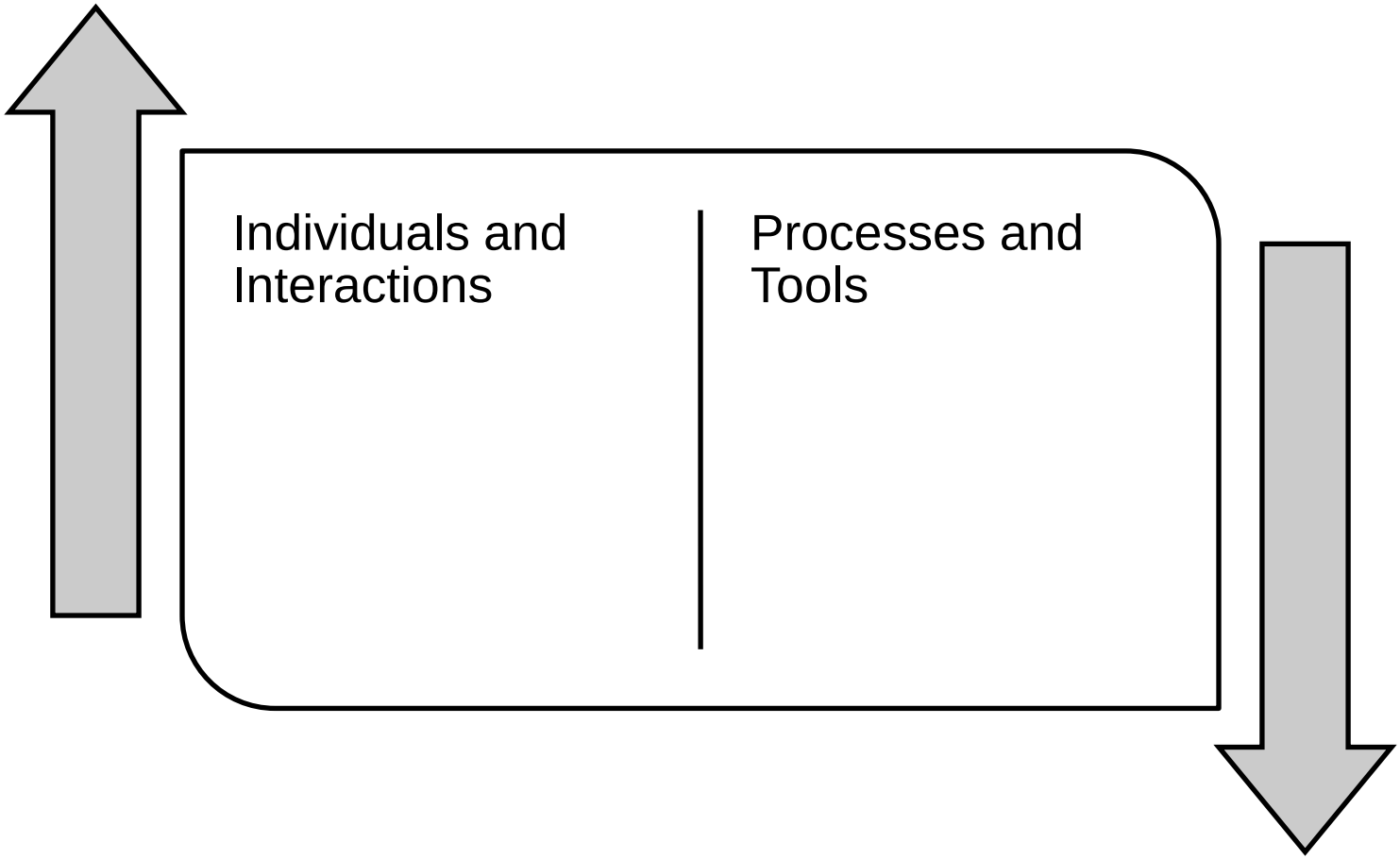
What is Agile?

An iterative and incremental approach to software development that uses a specific set of values and principles expressed in the
Agile Manifesto

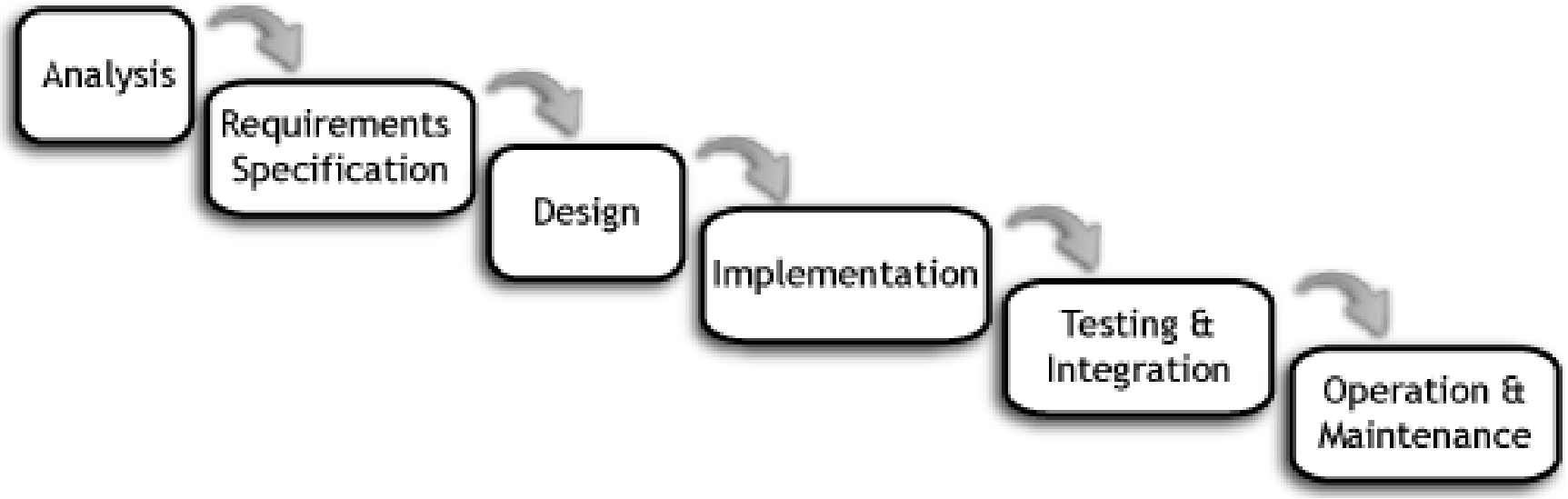
We are uncovering better ways of developing software by doing it and helping others do it.

Through this work we have come to value…

The Agile Manifesto

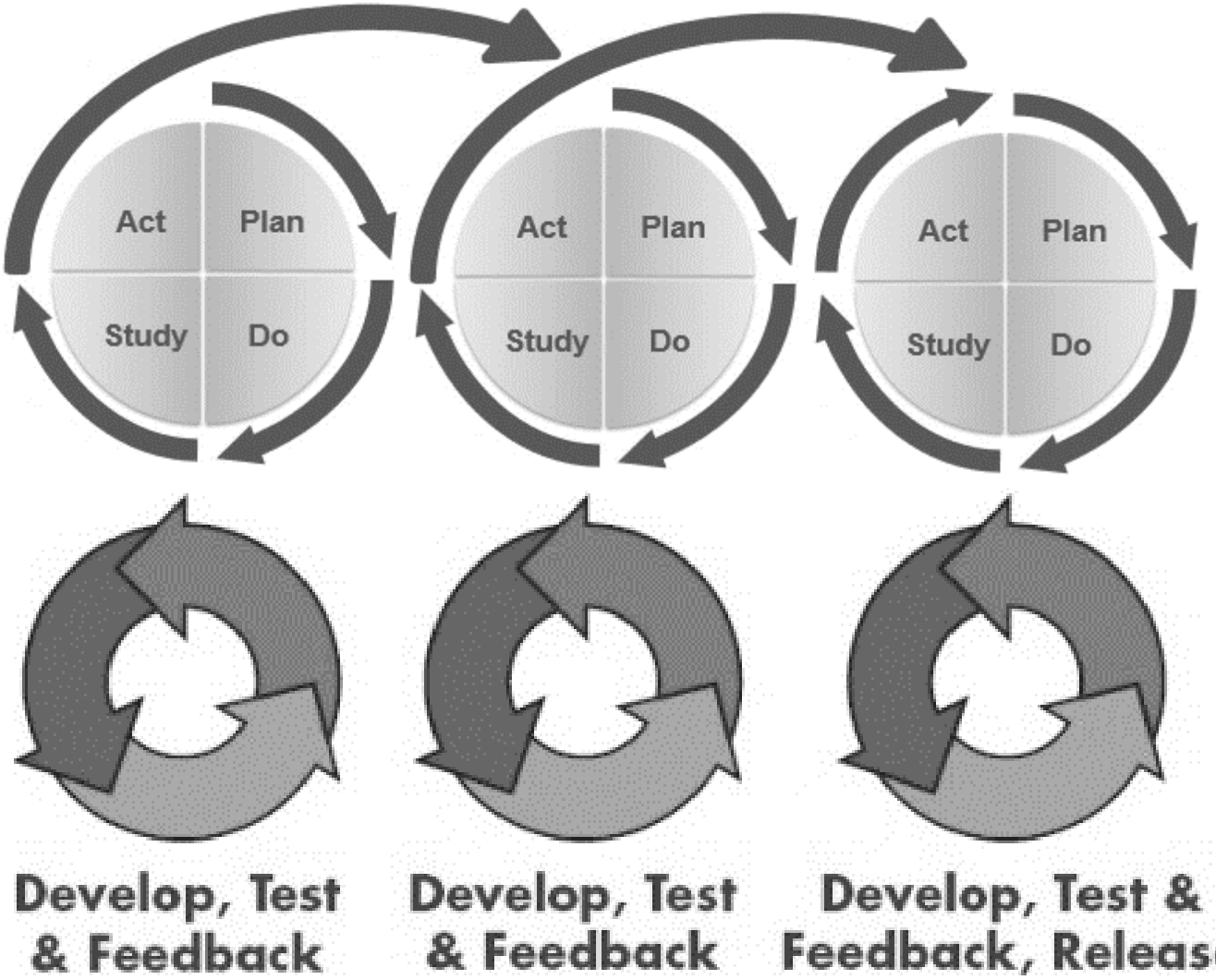


Waterfall Project Management



Lean

Agile


Act
Plan
Study
Do
Act
Plan
Study
Do
Act
Plan
Study
Do
Develop, Test & Feedback
Develop, Test & Feedback
Develop, Test & Feedback, Release

Why does Eastman IT need Agile?

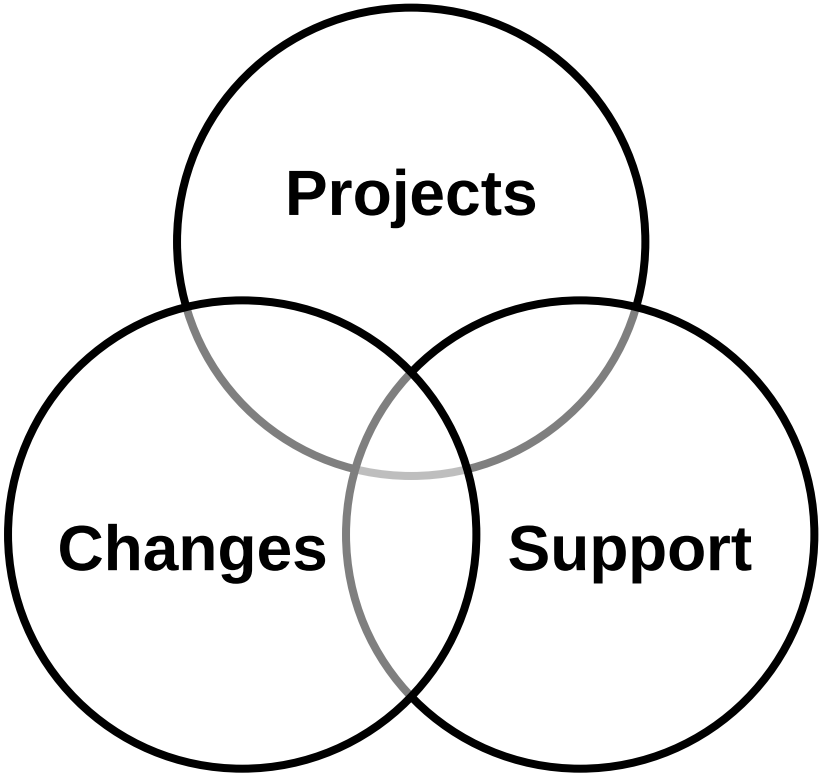
- Projects take too long
- Understanding need vs. request is difficult
- Lack of deep alignment with internal partners
- Unable to easily make changes
- Onboarding employees takes too long
- Measures focused on schedule and budget
- Too many things “In Process”…
- …and not enough things getting “Complete”

Agile Approaches

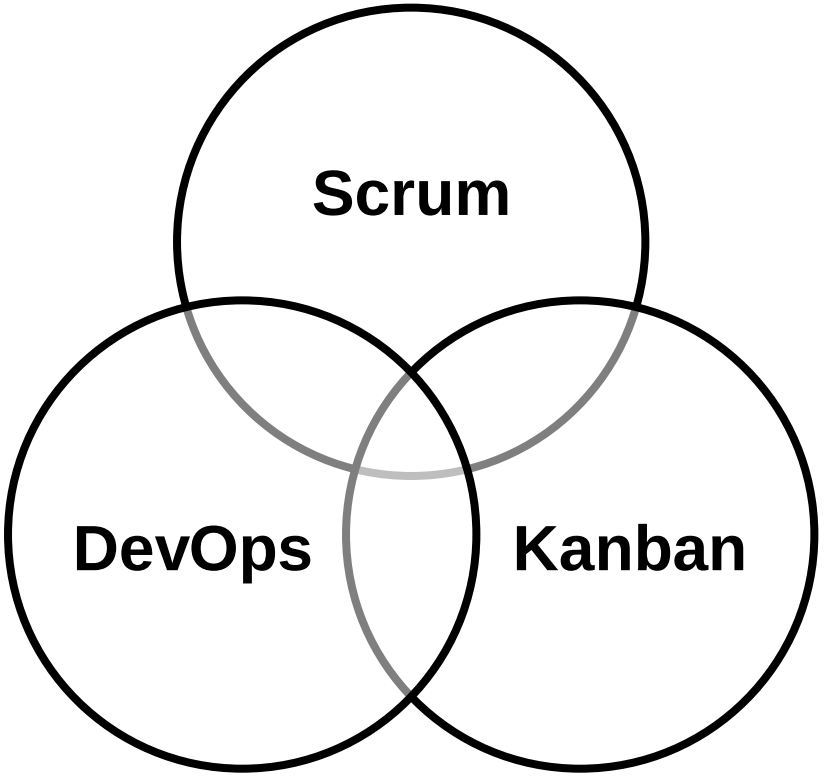
Scrum	Extreme Programming (XP)	Kanban
Dynamic Systems Development Method (DSDM)	Feature Driven Development	DevOps

Eastman IT's Agile Approach

Types of Work



Ways of Working



Choose Your Own Adventure!

Agile Ceremonies

Agile Ceremonies

- Visioning / User Story Mapping
- Sprint / Iteration Planning
- Daily Scrum / Standup
- Demo and Review
- Retrospective
- Scrum of Scrums

Ceremonies: Daily Standup

- Communicate progress
- Commit to work
- Share impediments

1. What did you plan to accomplish yesterday?
2. What was the result of your work yesterday?
3. If you did not meet your plan, what caused the deviation?
4. What do you plan to get done today?
5. Are there any distractions or impediments that need to be addressed?
6. Product Owner Comments

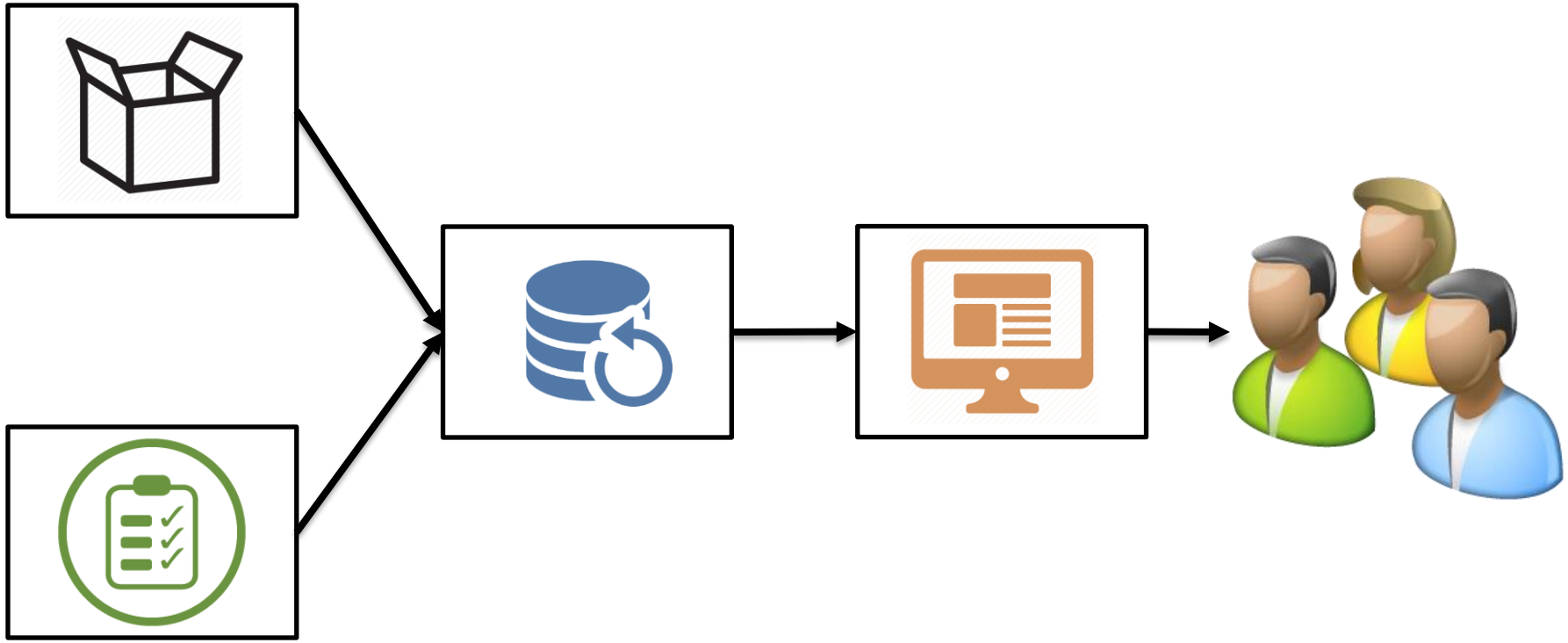
Ceremonies: Retrospective

- Scrum format for continuous improvement
- Frequent occurrence
  - Live data collection
  - Review and renew each sprint / iteration

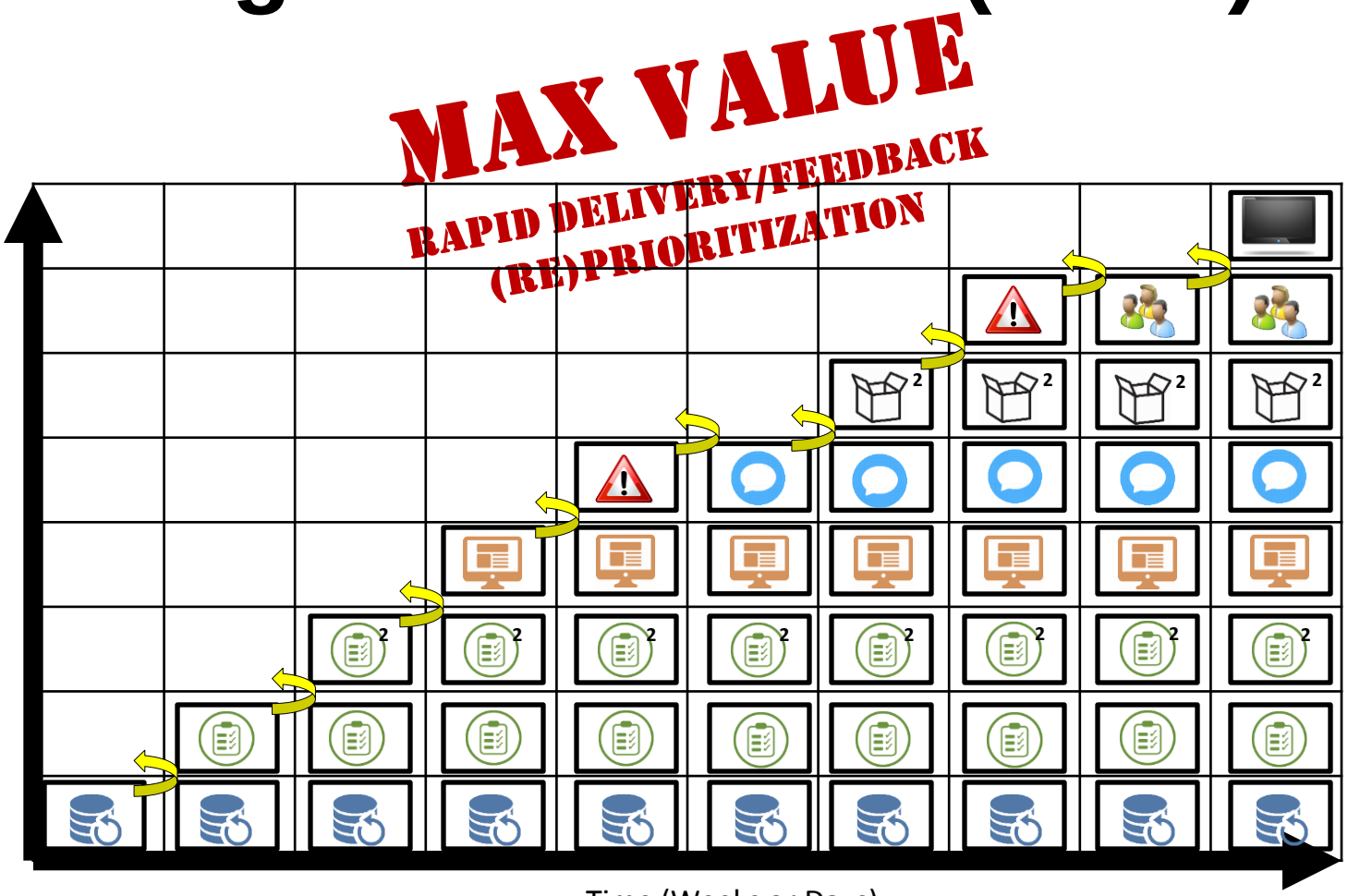
+	Δ
Plus	**Delta**

Agile Simulation

Agile Simulation



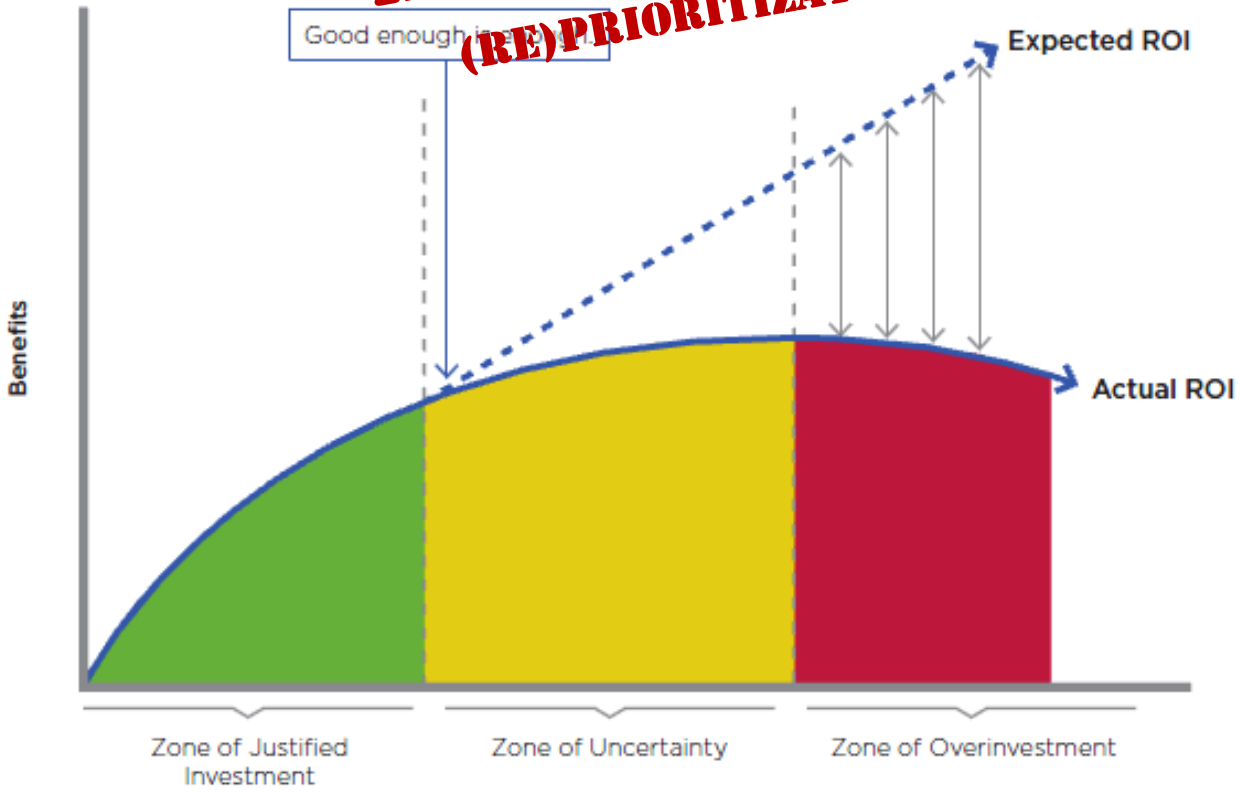
Agile Simulation (cont.)



Agile Simulation (cont.)

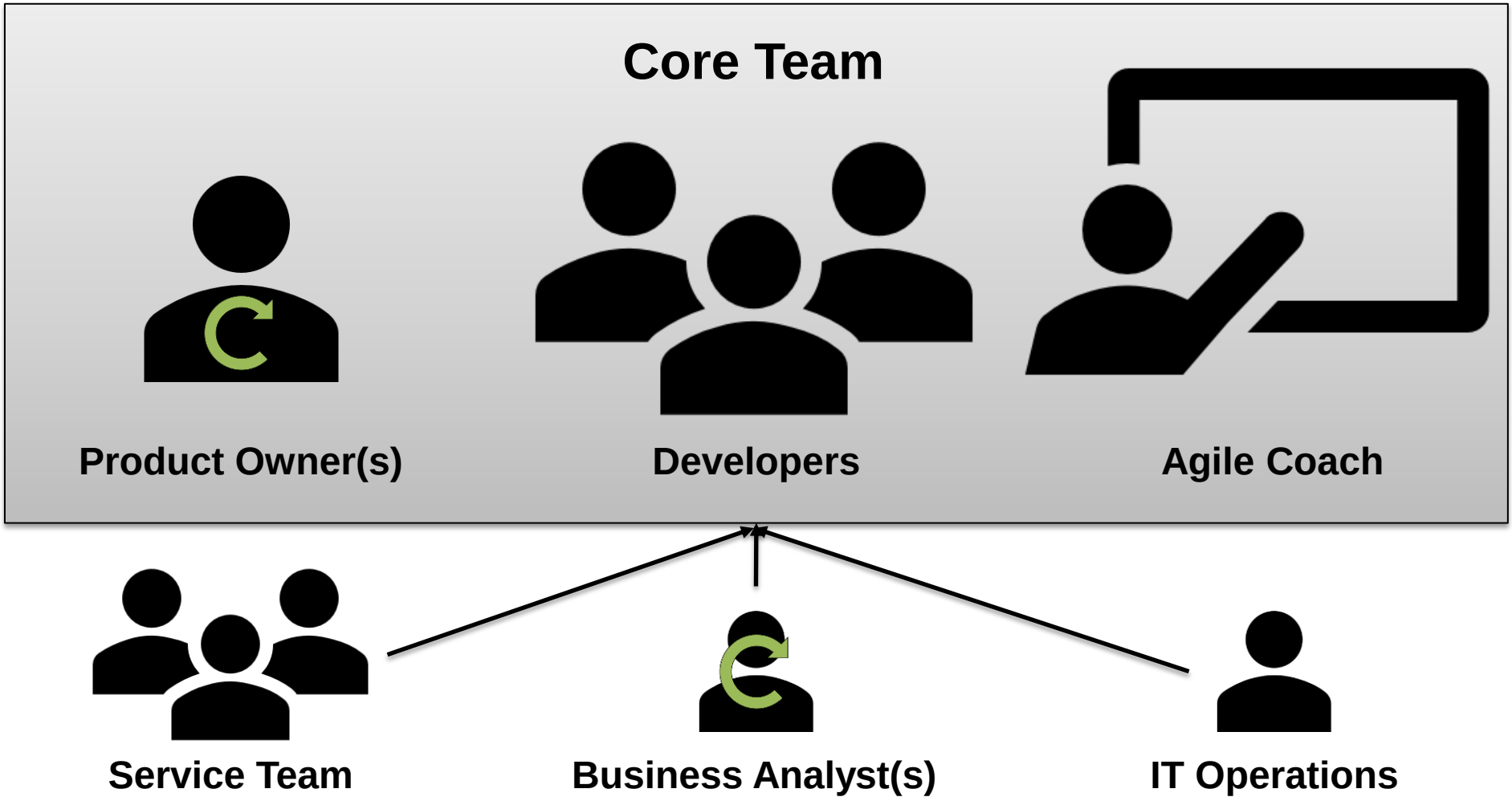
MAX VALUE

(RE)PRIORITIZATION



Agile Team Members

Agile Team Members



Eastman IT Agile Results

Eastman IT Agile Results

- Projects take too long
- Understanding need vs. request is difficult
- Lack of deep alignment with internal partners
- Unable to easily m
- Onboardin
- Me
- Too many things "In Process"
- …and not enough things getting "Complete"

Agile 45% faster

8/12 Agile teams aligned to value stream

Partner-owned backlogs

Agile now preferred for onboarding

Now focused on velocity and commitment

We still suck at this, but we're working on it.

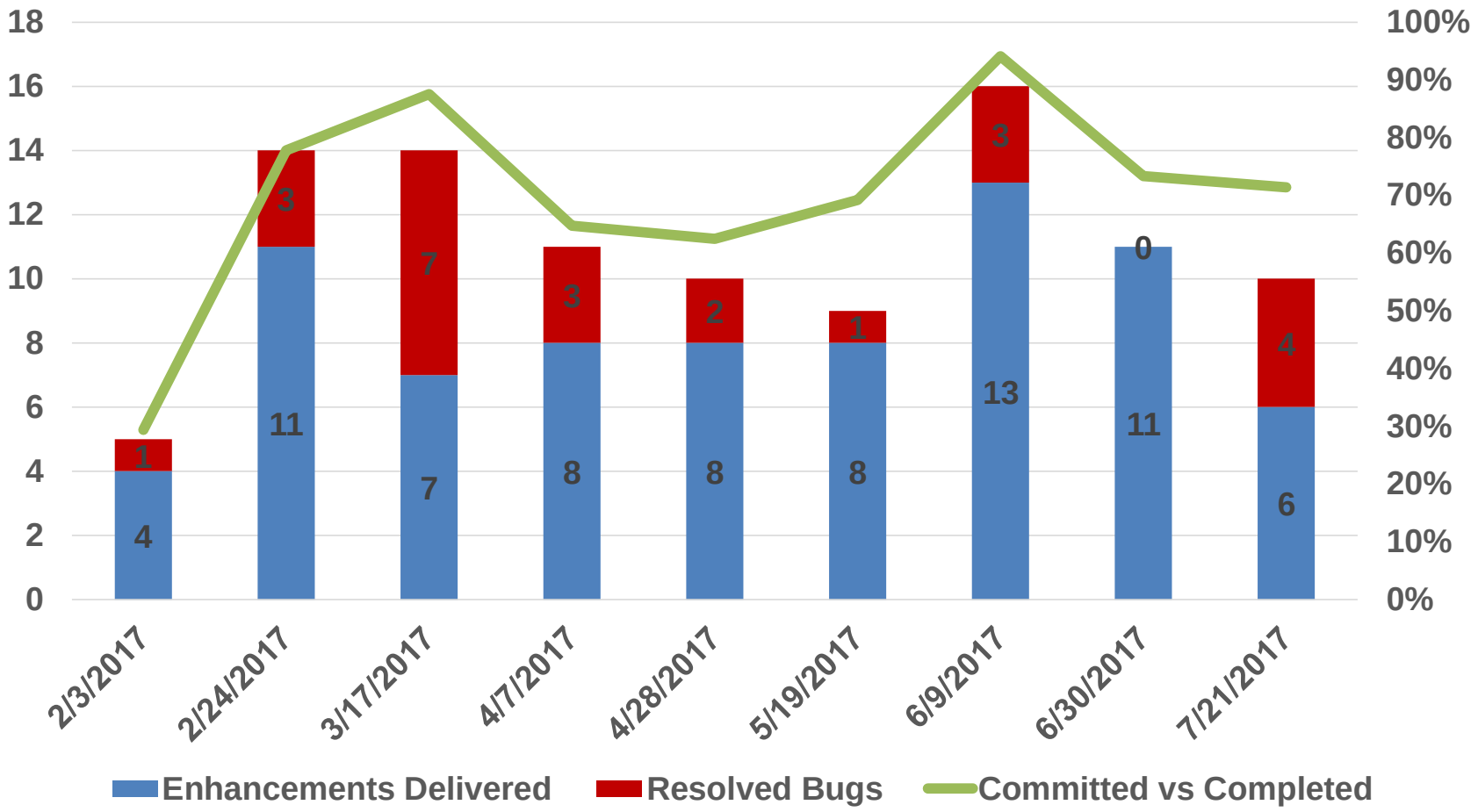
Eastman IT Agile Results: PPM

2016

3-5

Enhancements/Bugs
Completed Per Iteration

Eastman IT Agile Results: PPM

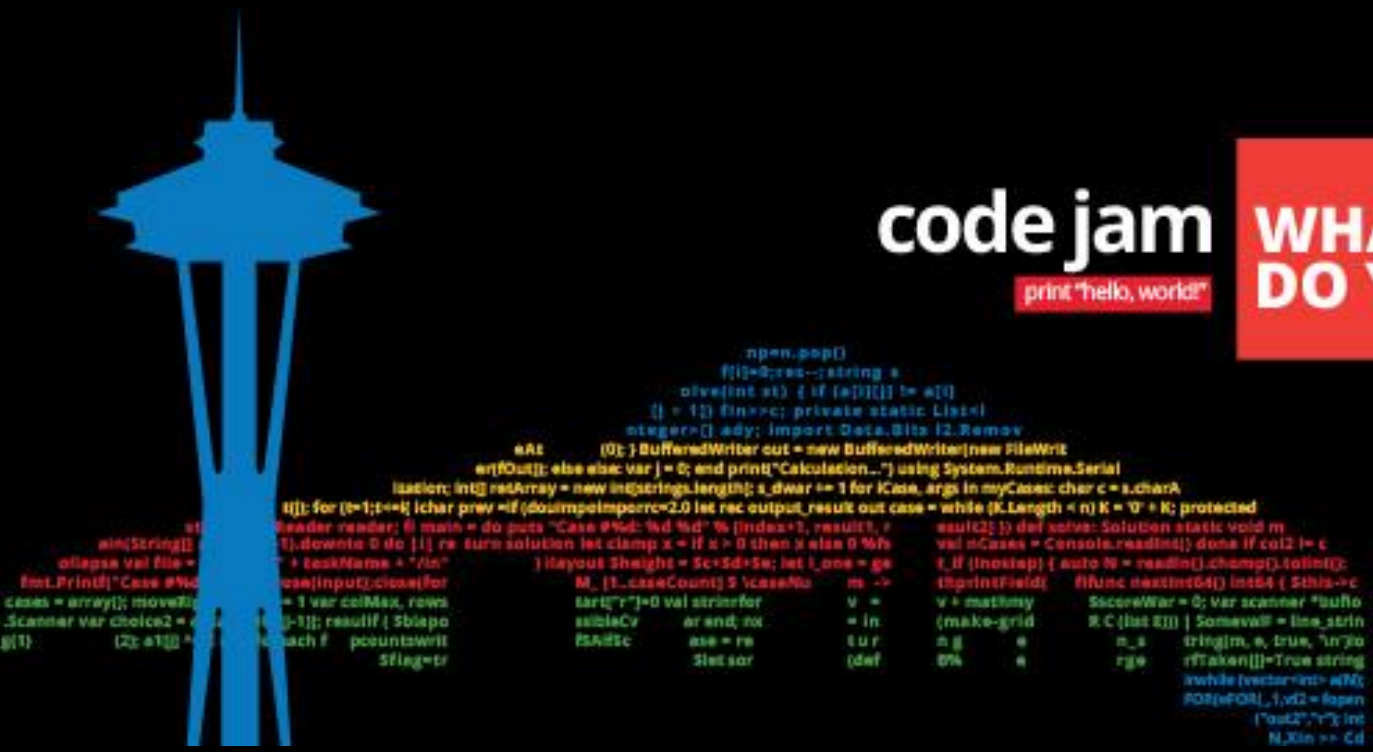


Client Feedback

"Traditionally, this project would have taken over six months. You guys did it in nine weeks and gave us exactly what we needed."

Supply Chain project Product Owner

Code Jams



code jam

print "hello, world!"

WHAT LANGUAGE DO YOU SPEAK?

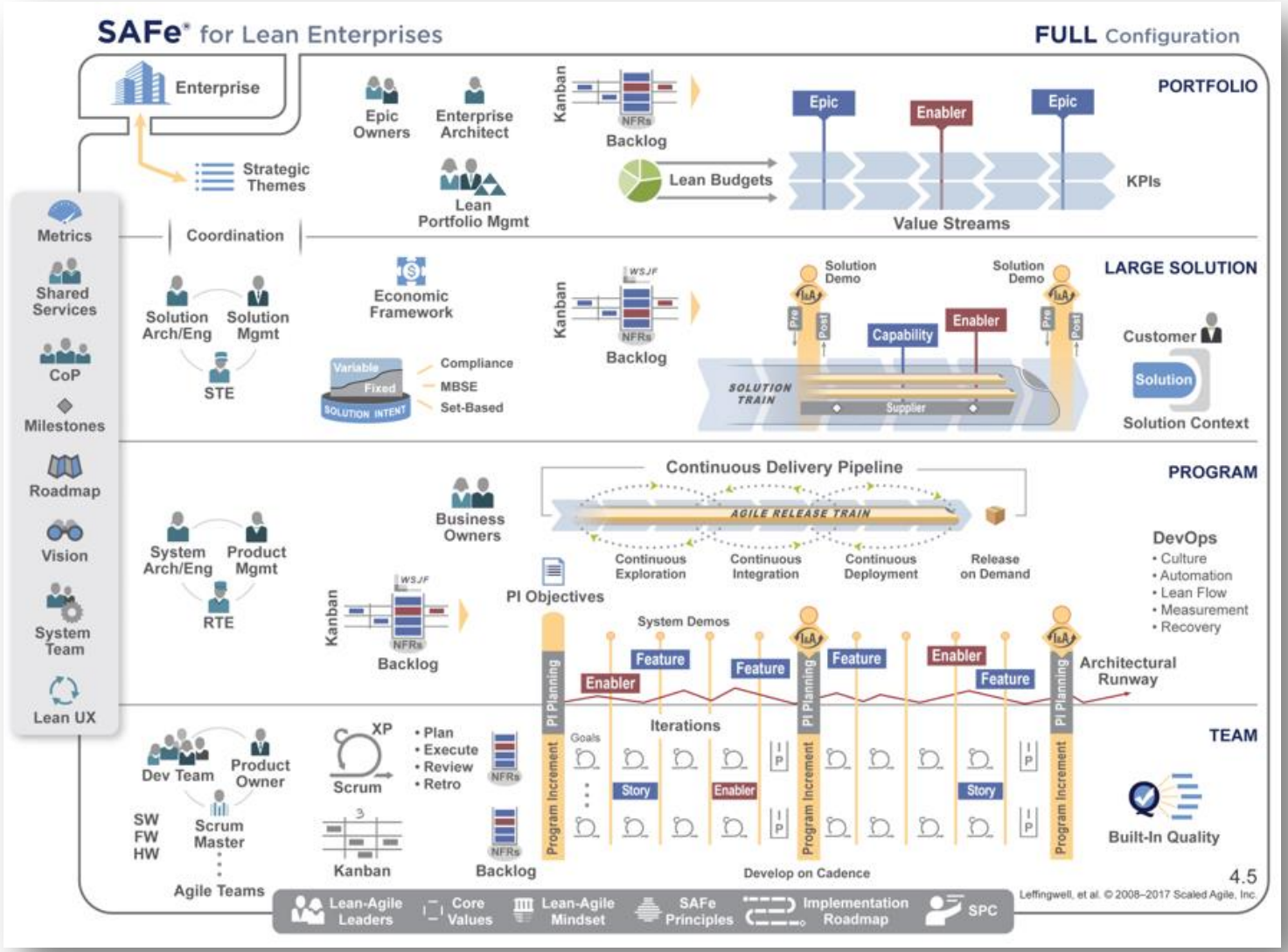
Code Jams

- One week or less events where teams:
- Collaborate across orgs → Networking
- Focus on a single problem → Speed
- Use non-prescriptive tech → Innovation
- Manage work with Agile → Flexibility

…a software development Kaizen Event…

LANDING PAGE
EASTMAN
EASTMAN
Search Forms
Pending
In Progress
Completed
KRISPY KREME

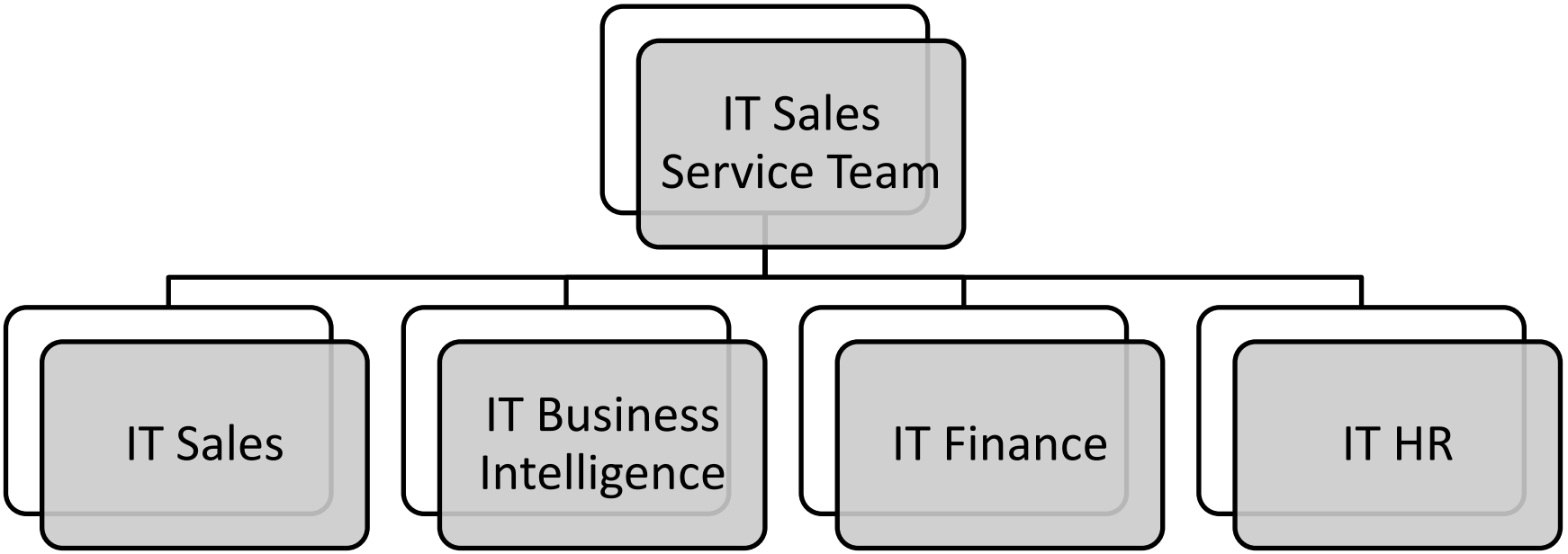
Scaled Agile Framework (SAFe)


SAFe® for Lean Enterprises
FULL Configuration
Enterprise
Strategic Themes
Epic Owners
Enterprise Architect
Lean Portfolio Mgmt
Kanban
NFRs
Backlog
Lean Budgets
Epic
Enabler
Epic
KPIs
Value Streams
PORTFOLIO
Metrics
Shared Services
CoP
Milestones
Roadmap
Vision
System Team
Lean UX
Coordination
Solution Arch/Eng
Solution Mgmt
STE
Economic Framework
Variable
Fixed
SOLUTION INTENT
Compliance
MBSE
Set-Based
WSJF
Kanban
NFRs
Backlog
Solution Demo
Pre
Post
Capability
Enabler
SOLUTION TRAIN
Supplier
Solution Demo
Customer
Solution
Solution Context
LARGE SOLUTION
System Arch/Eng
Product Mgmt
RTE
Business Owners
Continuous Delivery Pipeline
AGILE RELEASE TRAIN
Continuous Exploration
Continuous Integration
Continuous Deployment
Release on Demand
PI Objectives
WSJF
Kanban
NFRs
Backlog
System Demos
Feature
Enabler
Feature
Feature
Enabler
Feature
Architectural Runway
PI Planning
Program Increment
Iterations
Goals
Story
Enabler
Story
IP
PROGRAM
DevOps
• Culture
• Automation
• Lean Flow
• Measurement
• Recovery
Dev Team
Product Owner
SW
FW
HW
Scrum Master
Agile Teams
XP
Scrum
• Plan
• Execute
• Review
• Retro
Kanban
NFRs
Backlog
Develop on Cadence
Built-In Quality
TEAM
Lean-Agile Leaders
Core Values
Lean-Agile Mindset
SAFe Principles
Implementation Roadmap
SPC
4.5
Leffingwell, et al. © 2008–2017 Scaled Agile, Inc.

Scaled Agile Framework (SAFe)

- Pioneered by Dean Leffingwell
- Significantly influenced by Lean
- Primary takeaways:
  - Align work/Agile teams with value stream
  - Plan the whole value stream
  - Schedule backwards from capacity
  - Continuously (re)prioritize
  - Limit WIP

SAFe in Eastman IT (Example)



Collocation

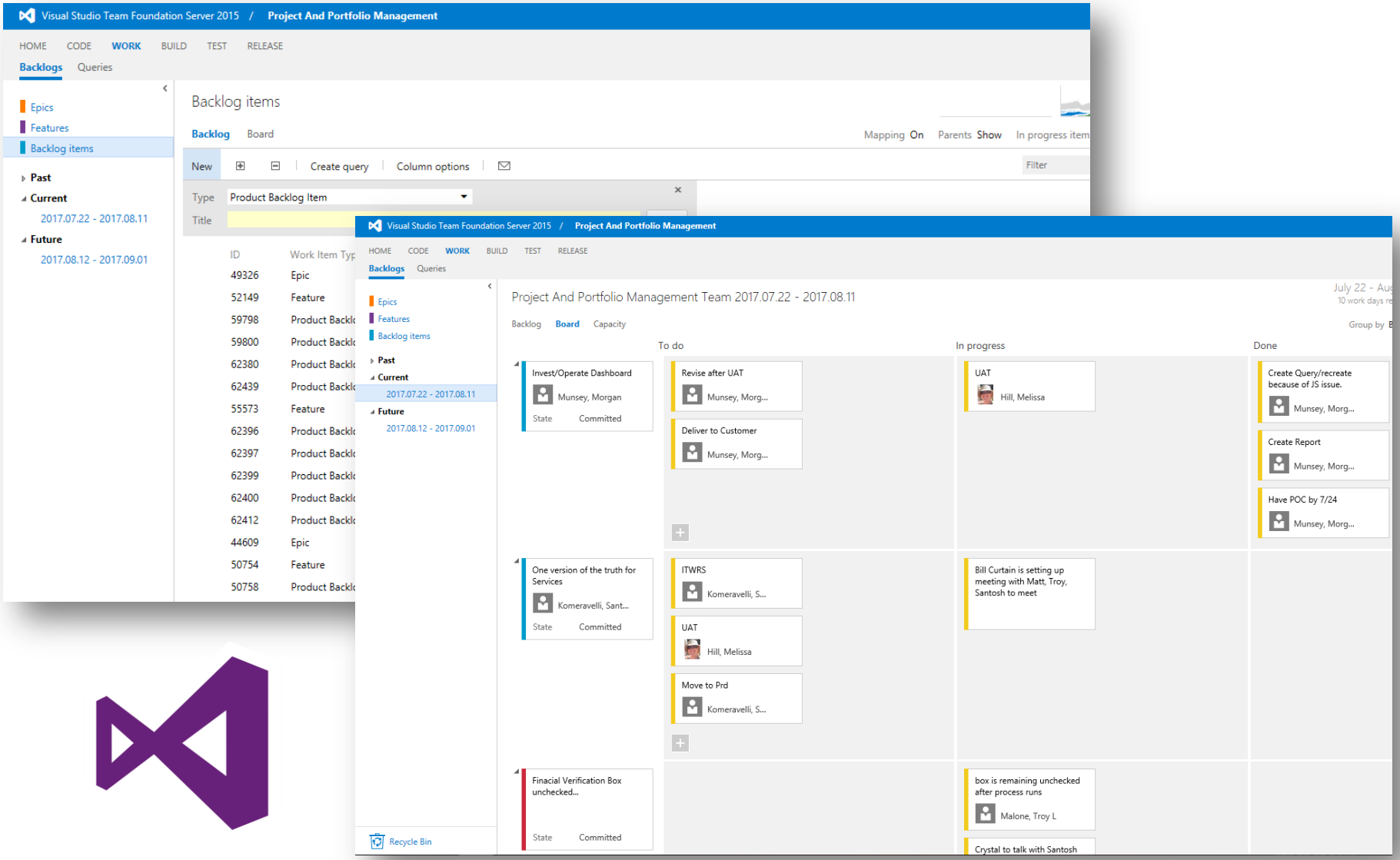
Collocation

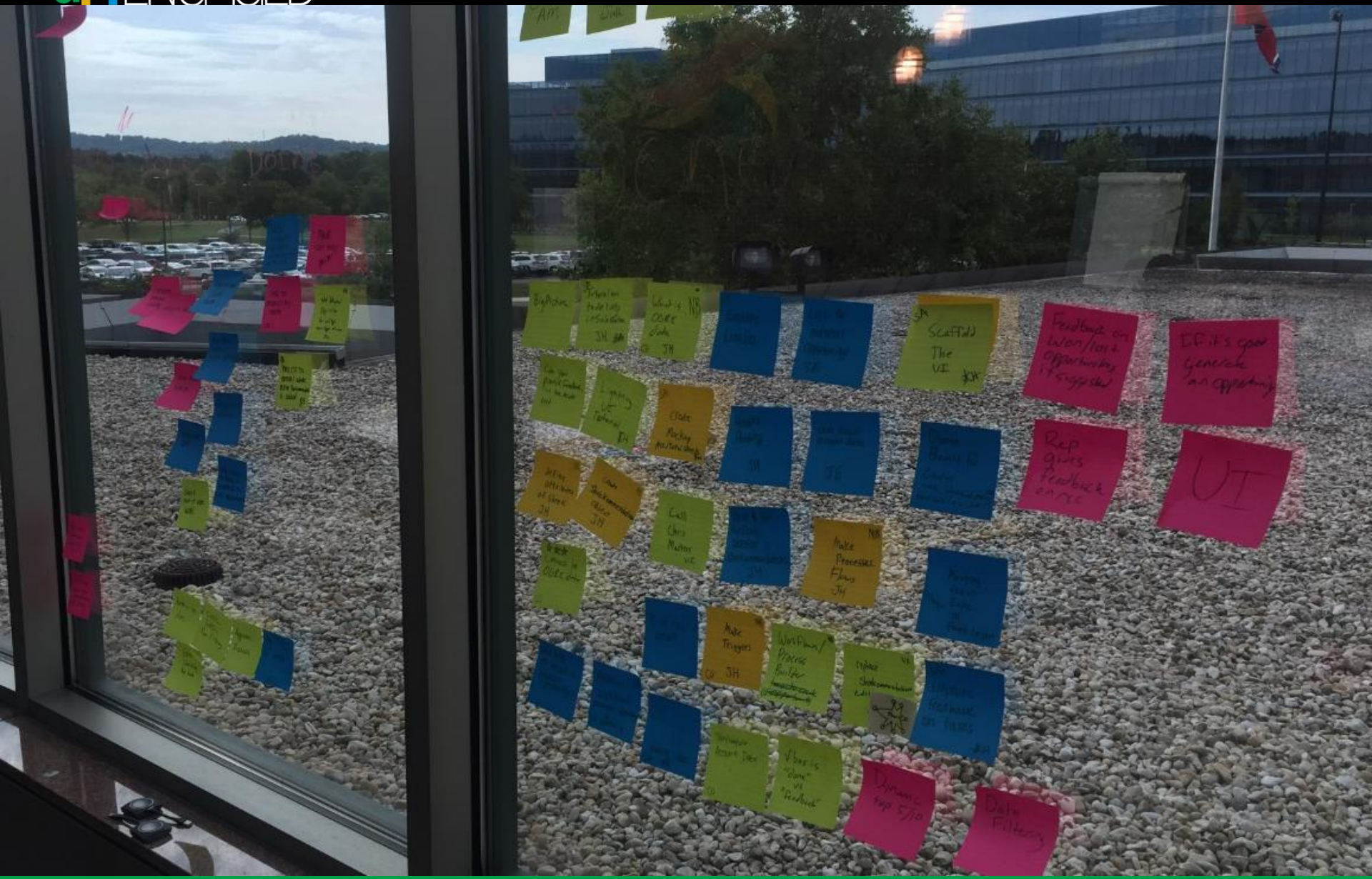
- The ideal, not the standard or norm
- Significantly increases cross functional engagement
- Significantly reduces waiting and rework
- Team >>> Gemba
- Considerations:
  - Collaborative workspace
  - Global employee base
  - Collaboration tech (low or high)
  - Personality types

Task Boards

Task Boards

- Manual or electronic
- To Do, In Process, Waiting, Done
- Why task boards?
  - Visual
  - Interactive
  - Engaging
  - Ownership
  - Accomplishment


Visual Studio Team Foundation Server 2015 / Project And Portfolio Management
HOME CODE WORK BUILD TEST RELEASE
Backlogs Queries
Epics
Features
Backlog items
Past
Current
2017.07.22 - 2017.08.11
Future
2017.08.12 - 2017.09.01
Backlog items
Backlog Board
Mapping On Parents Show In progress item
New Create query Column options Filter
Type Product Backlog Item
Title
ID Work Item Typ
49326 Epic
52149 Feature
59798 Product Backl
59800 Product Backl
62380 Product Backl
62439 Product Backl
55573 Feature
62396 Product Backl
62397 Product Backl
62399 Product Backl
62400 Product Backl
62412 Product Backl
44609 Epic
50754 Feature
50758 Product Backl
Visual Studio Team Foundation Server 2015 / Project And Portfolio Management
HOME CODE WORK BUILD TEST RELEASE
Backlogs Queries
Epics
Features
Backlog items
Past
Current
2017.07.22 - 2017.08.11
Future
2017.08.12 - 2017.09.01
Project And Portfolio Management Team 2017.07.22 - 2017.08.11
July 22 - Aug
10 work days re
Backlog Board Capacity
Group by
To do
In progress
Done
Invest/Operate Dashboard
Munsey, Morgan
State Committed
Revise after UAT
Munsey, Morg...
Deliver to Customer
Munsey, Morg...
UAT
Hill, Melissa
Create Query/recreate because of JS issue.
Munsey, Morg...
Create Report
Munsey, Morg...
Have POC by 7/24
Munsey, Morg...
One version of the truth for Services
Komeravelli, Sant...
State Committed
ITWRS
Komeravelli, S...
UAT
Hill, Melissa
Move to Prd
Komeravelli, S...
Bill Curtain is setting up meeting with Matt, Troy, Santosh to meet
Finacial Verification Box unchecked...
State Committed
box is remaining unchecked after process runs
Malone, Troy L
Crystal to talk with Santosh
Recycle Bin


Scaffold
The VE
Feedback on Wow/Less Opportunity
Rep gives Feedback on RC
VE
Make Processes
Make Triggers
Data Filtering

Conclusion

What are Eastman's next steps?

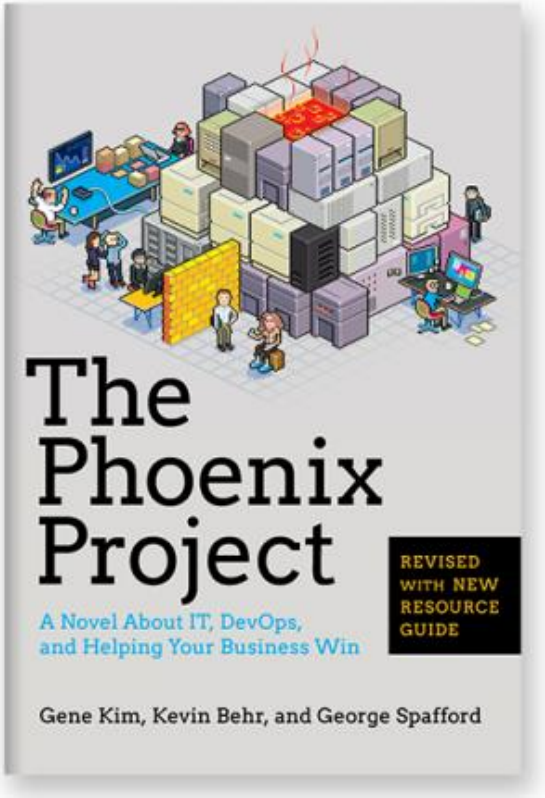
- Expose and visualize all work
- Limit WIP by planning backwards from capacity
- Continue alignment of delivery teams and Agile teams with value streams
- Plan work at value stream level (SAFe)

Why should agility matter to you?

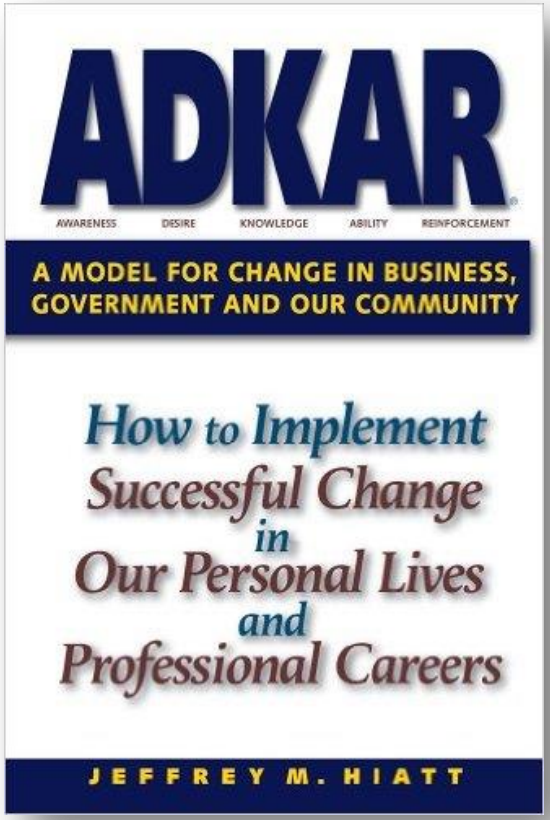
1. Speed wins
2. Perfection equals second place
3. Who's perfection is it anyway?
4. Energizes employees
5. Energizes customers

https://www.americanexpress.com/us/small-business/openforum/articles/5-reasons-why-being-agile-is-more-important-than-being-perfect/

What has influenced Eastman IT?



SCALED AGILE™



Thank You!

Your opinion is important to us!

Please take a moment to complete the survey using the conference mobile app.

Session No: TS/04

Agile 101 for the Lean Practitioner

Jake Mitchell

Eastman Chemical Company

jakemitchell@eastman.com