Government Enterprise Agility

Scaling to the Portfolio with SAFe

Phil Gardiner

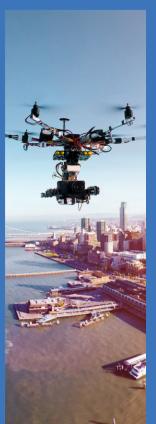
gardinerp@saic.com
@philgardiner
https://www.linkedin.com/in/philgardiner













Digital disruption is affecting every industry across the globe.

It's not just tech companies.

From shipbuilders and farmers to banks, airlines, and government agencies, virtually every major organization is on some sort of digital transformation journey.

In 2018, enterprises are expected to invest \$1.3 trillion in digital transformation initiatives.

Many will not reach their stated goals.

IDC Worldwide Semiannual Digital Transformation Spending Guide

https://www.idc.com/getdoc.jsp?containerId=prUS43381817



How do you ensure that your organization will be one of those who succeed with digital transformation?

Introducing the Lean Enterprise

The Lean Enterprise is a thriving digital age business that delivers competitive systems and solutions to its customers in the shortest sustainable lead time.

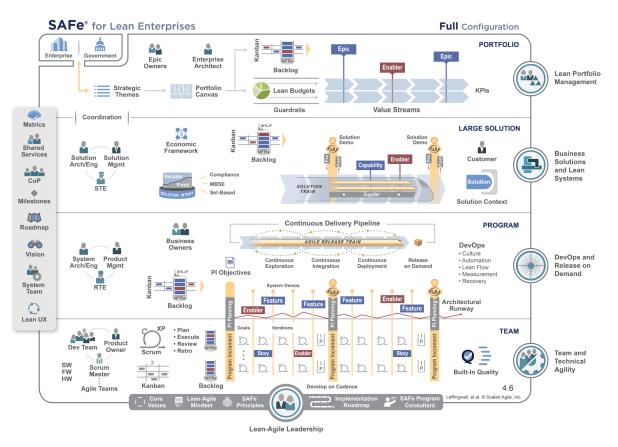


The world's leading framework for enterprise agility

SAFe® for Lean Enterprises is a knowledge base of proven, integrated principles, practices, and competencies for Lean, Agile, and DevOps

scaledagileframework.com

SAFe® 4.6 for Lean Enterprises

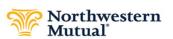


Within enterprise and government



















SK hynix memory solutions

































(Dutch Tax Administration)

SAFe® 4.6 introduces the Five Core Competencies of the Lean Enterprise



Lean-Agile Leadership



Team and Technical Agility



DevOps and Release on Demand



Business Solutions and Lean Systems Engineering



Lean Portfolio Management

"We just don't have the knowledge and leadership skills to transform."

Lean-Agile Leadership

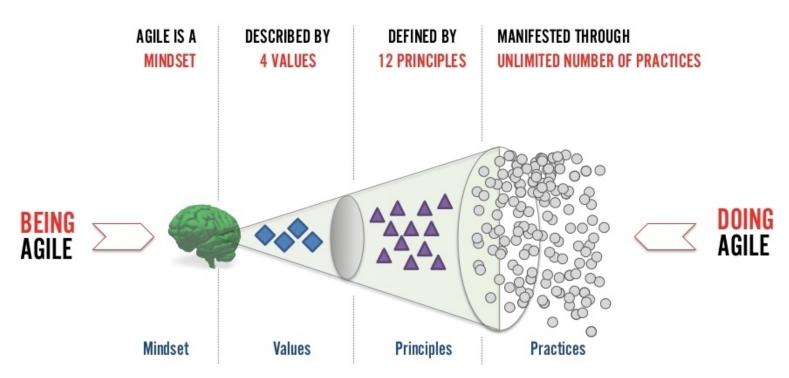
The Lean-Agile Leadership competency describes how Lean-Agile Leaders drive and sustain organizational change and operational excellence by empowering individuals and teams to reach their highest potential.

Core Competency

They do this by learning, exhibiting, teaching, and coaching SAFe's Lean-Agile mindset, values, principles, and practices.



What is Agile?



Source: Ahmed Sidkey, Agile 2014



Lean-Agile Leadership provides the basis for success

- Exemplify the Core Values
- ▶ Embrace a Lean-Agile Mindset
- Apply the SAFe Principles
- Lead the transformation

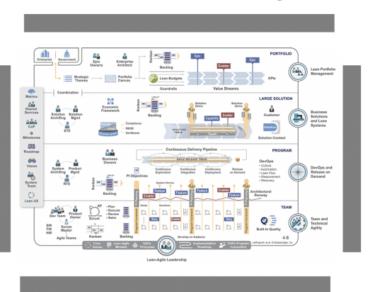


@Scaled Agile, Inc.

Exemplify SAFe Core Values

Built-in Quality

Alignment



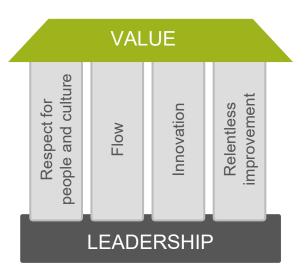
Transparency

Program Execution

© Scaled Agile, Inc.

Embrace the Lean-Agile Mindset

House of Lean



Value in the shortest sustainable lead time

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:

Individuals and interactions over processes and toolsWorking software over comprehensive documentationCustomer collaboration over contract negotiationResponding 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.

© Scaled Agile, Inc.

© Scaled Agile, Inc.

Apply SAFe Principles

```
#1 Take an economic view
```

#2 Apply systems thinking

#3 Assume variability; preserve options

#4 Build incrementally with fast, integrated learning cycles

#5 Base milestones on objective evaluation of working systems

#6 Visualize and limit WIP, reduce batch sizes, and manage queue lengths

#7 Apply cadence, synchronize with cross-domain planning

#8 Unlock the intrinsic motivation of knowledge workers

#9 Decentralize decision-making

© Scaled Agile, Inc.

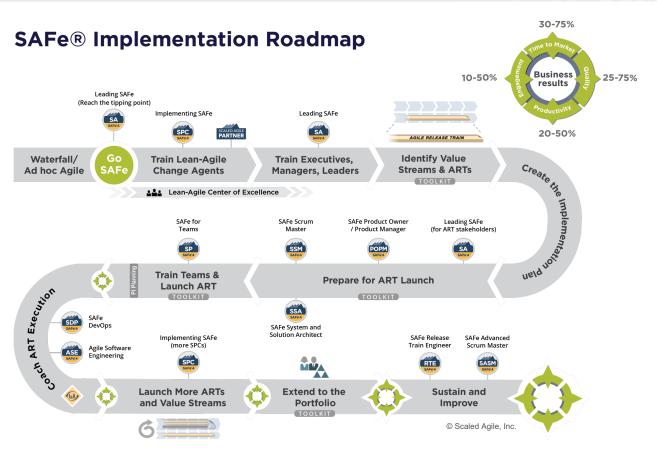
Use the Digital Service Plays

Today, too many of our digital services projects do not work well, are delivered late, or are over budget. To increase the success rate of these projects, the U.S. Government needs a new approach.

- Understand what people need
- Address the whole experience, from start to finish
- Make it simple and intuitive
- Build the service using agile and iterative practices
- Structure budgets and contracts to support delivery
- Assign one leader and hold that person accountable

- Bring in experienced teams
- Choose a modern technology stack
- Deploy in a flexible hosting environment
- Automate testing and deployments
- Manage security and privacy through reusable processes
- Use data to drive decisions
- Default to open

Lead the transformation



"Our Agile teams are not disciplined or predictable, plus we have lots of technical debt"

Team and Technical Agility

Core Competency

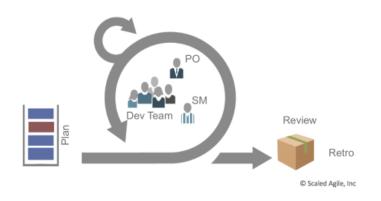
The Team and Technical Agility competency describes the critical skills and Lean-Agile principles and practices that are needed to create high-performing Agile teams who create high-quality, well designed technical solutions.

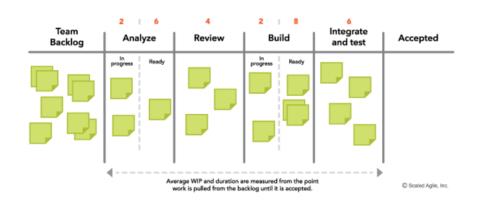
Continuous attention to technical excellence and good design enhances agility.

—Agile Manifesto

Scrum and Kanban provide the basics

- Agile teams are cross-functional, self-organizing entities that can define, build and test, and where applicable deploy, increments of value
- Scrum optimizes teams for communication and value delivery
- Kanban is applied to optimize value flow





"Now we need DevOps and continuous delivery to keep up with the competition!"

DevOps and Release on Demand

Core Competency

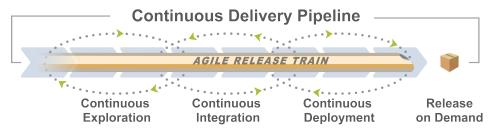
The DevOps and Release on Demand competency describes how implementing DevOps and a continuous delivery pipeline provides the enterprise with the capability to release value, in whole or in part, at any time necessary to meet market and customer demand.

DevOps and Release on Demand

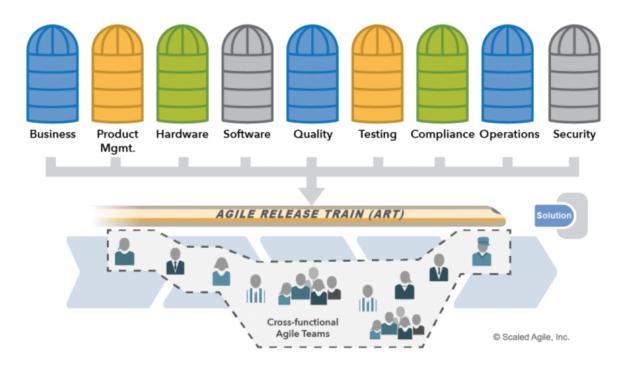
- ▶ DevOps provides the culture, automation, Leanflow, measurement, and recovery (CALMR) approach that enables continuous delivery and release on demand
- ▶ Agile Release Trains (ARTs) are teams of agile teams that are organized to release value on demand via a *continuous delivery pipeline*



© Scaled Agile, Inc.



ARTs are organized to define, build, deploy and release



5-12 teams working together on a solution

Synchronize with PI Planning

There is no magic in SAFe . . . except maybe for PI Planning

- All stakeholders face-to-face (but typically multiple locations)
- Management sets the mission, with minimum possible constraints
- Requirements and design emerge
- Important stakeholder decisions are accelerated
- ▶ Teams create—and take responsibility for—plans



For a short PI Planning example, see: **youtu.be/ZZAtl7nAB1M**

"We build really big systems, subject to rigorous compliance, it takes hundreds of people, and you can't integrate continuously."

Business
Solutions and
Lean Systems
Engineering

Core Competency

The Business Solutions and Lean Systems Engineering competency describes how to apply Lean-Agile principles and practices to the specification, development, deployment and evolution of large, complex software applications and cyber-physical systems.

Cooperation between the Components



Management of a system requires knowledge of the interrelationships between all of the components within the system and of everybody that works in it.

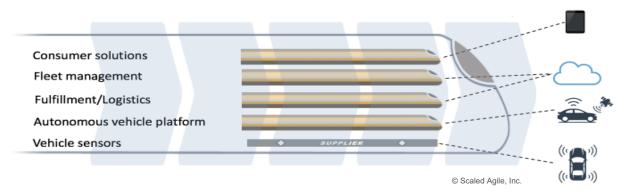
—W. Edwards Deming

Photo courtesy of the W. Edwards Deming Institute®

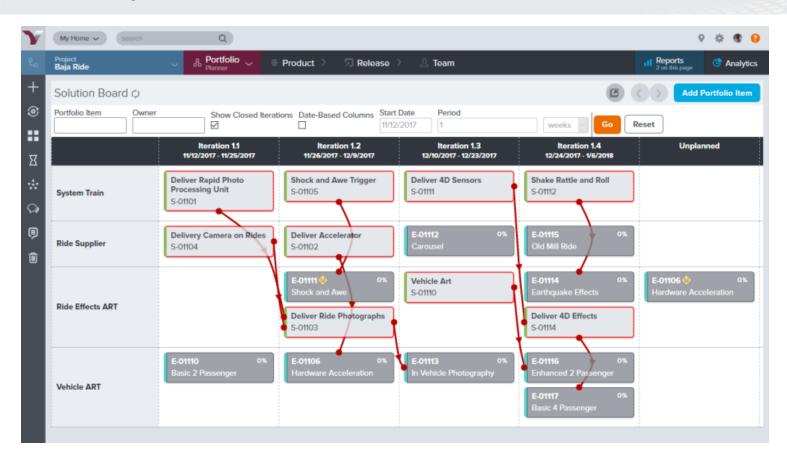


Solution Trains deliver Business Solutions and Lean Systems

- Solution trains coordinate multiple ARTs and suppliers
- ▶ Manage frequent integration
- Continuously address compliance concerns
- ▶ Architect for scale, modularity, releasability, and serviceability



Example: Solution Board

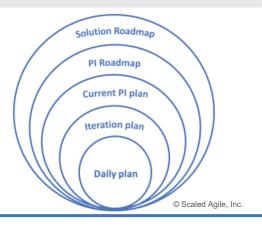


8 practices for building large and complex solutions

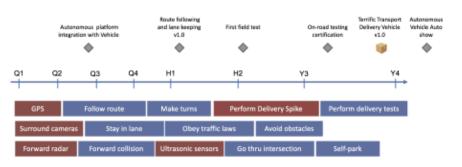




Apply multiple planning horizons

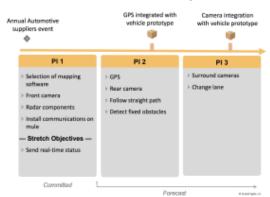


Solution Roadmap



© Scaled Agile, Inc.

PI Roadmap



"For executives and leaders who want to weave strategy and execution together into a single way of working"

Core Competency

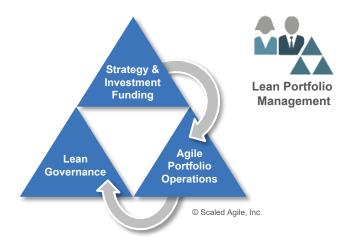
Lean Portfolio Management

The Lean Portfolio Management competency aligns strategy and execution by applying Lean and systems thinking to strategy and investment funding, Agile portfolio operations and governance.



Lean Portfolio Management creates strategic alignment

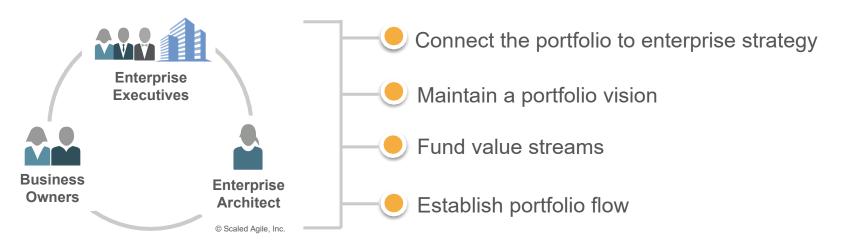
- Connects enterprise to portfolio strategy
- Creates Lean budget and investment guardrails
- Manages portfolio operations
- Provide Lean governance across value streams





Strategy and investment funding

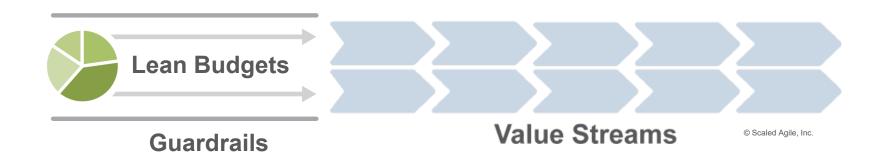
- ▶ Key stakeholders collaborate, developing and communicating the portfolio strategy
- ▶ They provide lean budgeting and funding to the value streams that develop and maintain the portfolio products and services
- ▶ Build a Portfolio Kanban system to establish flow



Fund value streams aligned with the business strategy

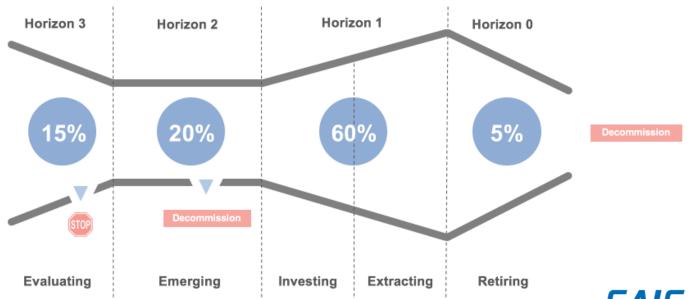
Funding value streams instead of projects provides the following benefits:

- ▶ Full control of spend
- ▶ No costly and delay-inducing project cost variance analyses
- ▶ No resource reassignments
- No blame game for project overruns

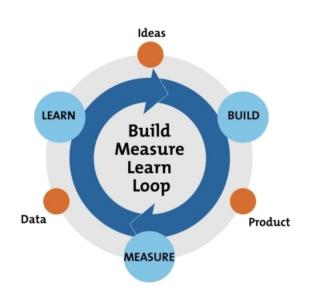


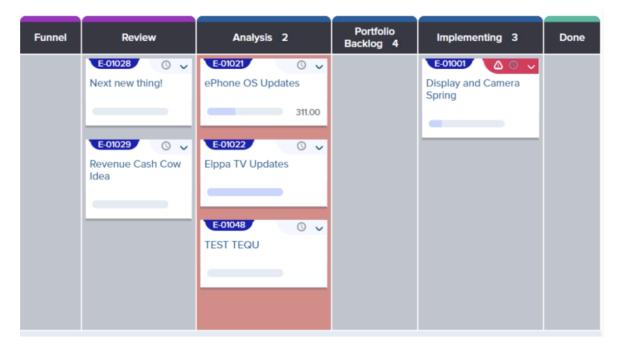
Establish Lean Budget Guardrails

- 1. Guide investments by horizons
- 2. Apply capacity allocation to optimize value and solution integrity
- 3. Approve significant initiatives
- 4. Continuous business owner engagement



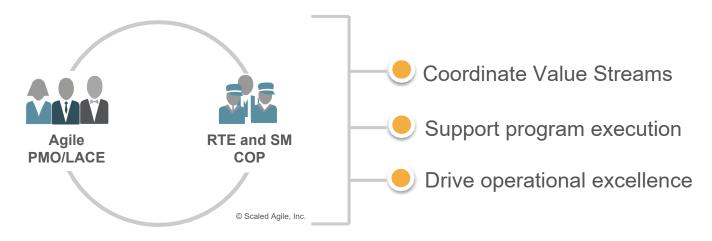
Establish Portfolio Flow





Agile portfolio operations

- Support SAFe implementation, relentless improvement and Agile practices to achieve business goals
- Enable continuous flow of value through coordination of Value Streams and ARTs



Lean governance

- ▶ Collaborate on forecasting and dynamic budgeting with an agile approach
- ▶ Establish minimum Lean portfolio metrics necessary to assure strategy is being implemented





New LPM Course



Learn more and register here:

https://www.scaledagile.com/certification/courses/lean-portfolio-management/

Additional Resources

- SAFe Government Portal: https://www.scaledagileframework.com/government/
- ▶ Defense Science Board Report: https://www.acq.osd.mil/dsb/reports/2010s/DSB_SWA_Report_FINALdelivered2-21-2018.pdf
- ▶ FedCLASS: A Case Study of Agile and Lean Practices in the Federal Government: https://resources.sei.cmu.edu/asset_files/SpecialReport/2018_003_001_527599.pdf
- Section 809 Panel: https://section809panel.org/
- Digital Services Playbook: https://playbook.cio.gov/
- ▶ TechFAR Hub: https://techfarhub.cio.gov/

Questions

