

Evolving SAFe

Exploring Current and Future Trends



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Topics

- ▶ Evolving Operational and Development Value Streams
- ▶ Participatory budgeting in support of Lean Budgets
- ▶ Developing cyber-physical systems with Industrial DevOps
- ▶ Continuous Delivery with DevSecOps
- ▶ Organizing Business and Technology teams for success

**We want your
Feedback!!**





Evolving Operational and Development Value Streams

Current Thinking and Purpose



- ▶ Extend value stream thinking across the entire Enterprise
- ▶ Better define operational value streams to aid with the *Value Stream and ART Identification Workshop*
- ▶ Clarify the difference between functional units and operational value streams
- ▶ Ensure employees within the Lean enterprise will be able to ‘find’ where they work
- ▶ The importance of the operational value stream to design customer centric solutions is emphasized
- ▶ Provides clarity on the scope of a SAFe Portfolio – *development value streams building solutions*

Defining Operational Value Streams

“Whenever there is a product for the customer, there is a value stream. The challenge lies in seeing it.”
—Learning to See

An **operational value stream** is the sequence of activities needed to deliver on a customer request.

- Examples include manufacturing a product, fulfilling an order, admitting and treating a patient, providing a loan, and delivering a professional service.



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Types of Operational Value Streams

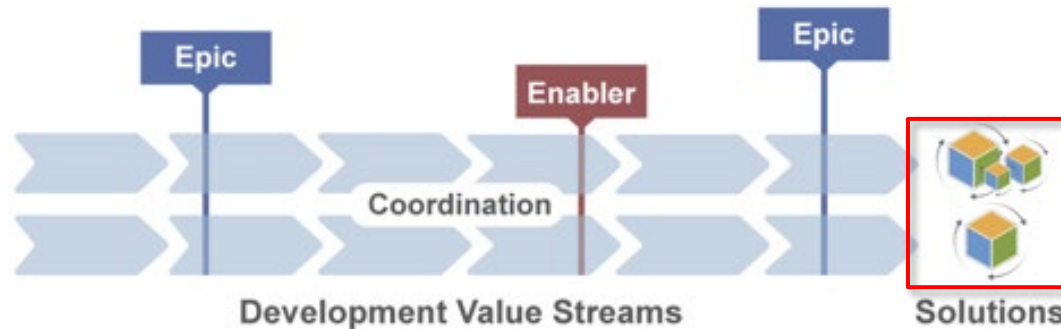
1. **Fulfillment** value streams represent the information flow, people and systems necessary to process a customer request, deliver value and receive monetary or equivalent value.
2. **Manufacturing** value streams convert raw materials into products customers purchase.
3. **Supporting** value streams include end-to-end workflows for things like hiring and retention, and executing a complete enterprise sales cycle.

Defining Development Value Streams

“Lean companies focus on value streams to eliminate non-value-creating activities. Good development systems consistently create profitable (operational) value streams.” —Alan Ward

A **development value stream** is the sequence of activities needed to convert a business hypothesis into a technology-enabled solution (product or service) that delivers customer value.

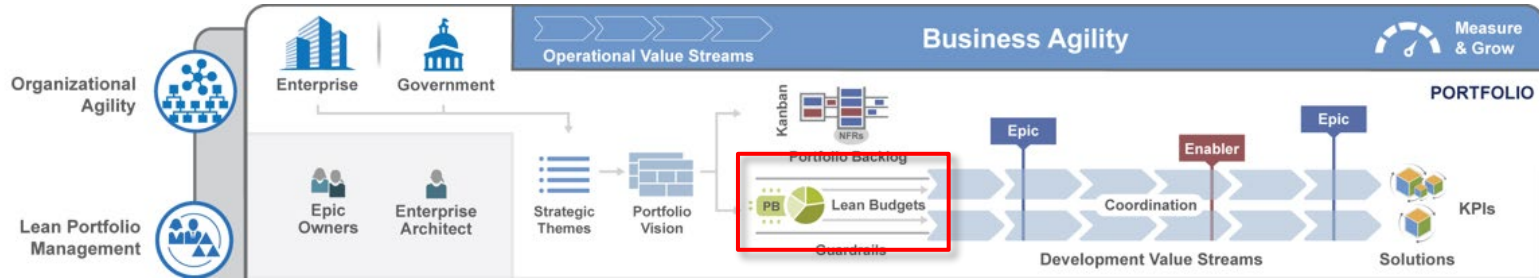
- Examples include designing a medical device or geophysical satellite or developing and deploying a CRM system or ecommerce web site.



Lean Budgets and Participatory Budgeting

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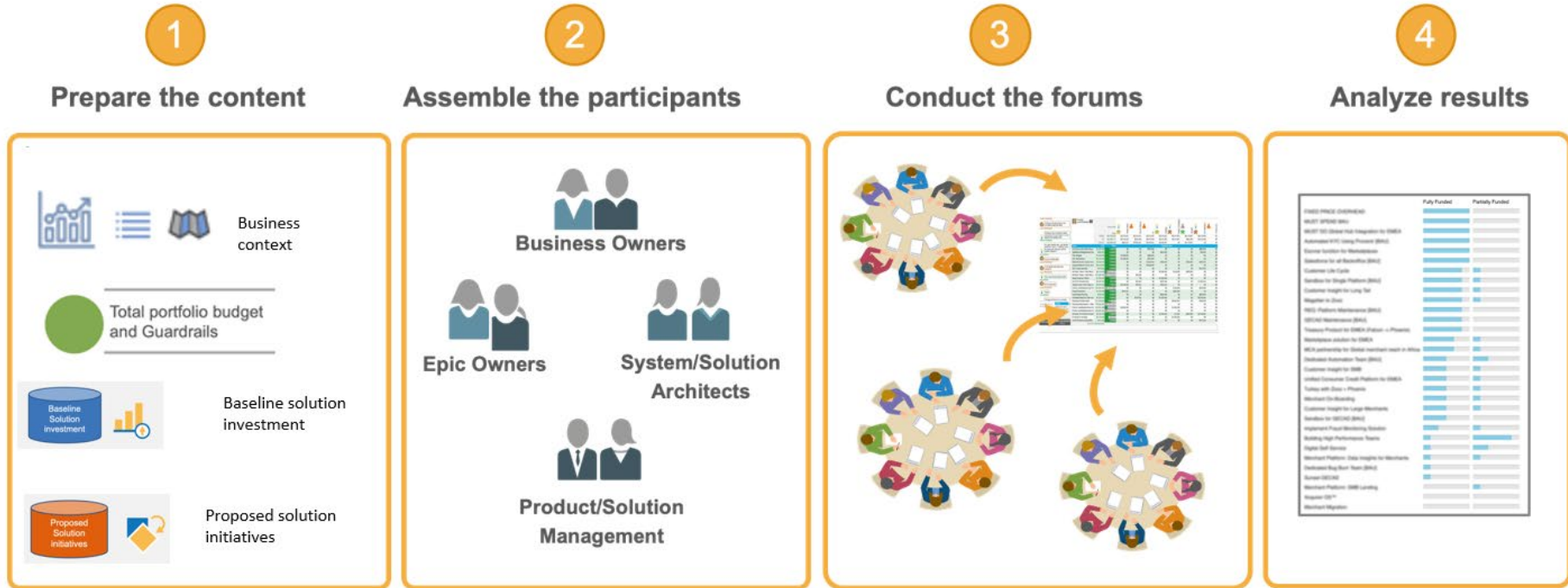
Current Thinking and Purpose



- ▶ Surface the Participatory Budgeting (PB) process as the *recommended* approach
- ▶ Extends 'big-room event' collaboration to the Portfolio
- ▶ Provides leaders with insights and perspectives from multiple stakeholders
- ▶ Creates alignment on difficult funding choices
- ▶ Improves engagement and morale
- ▶ Reduces implementation time and overhead

Overview of the Participatory Budgeting Process

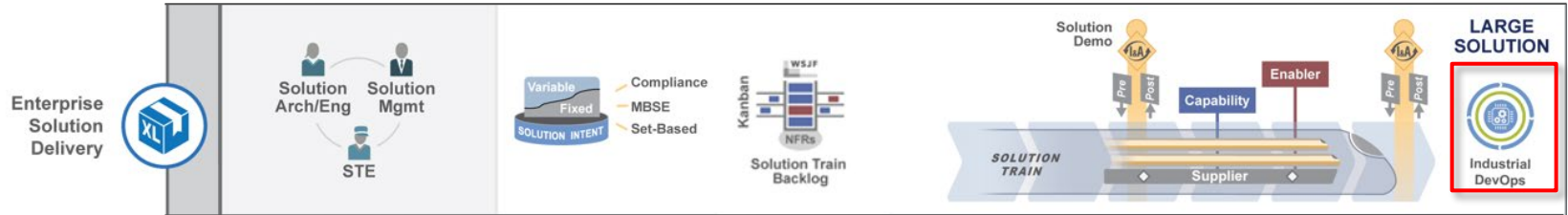
Participatory Budgeting (PB) is the process that LPM uses to allocate the total portfolio budget to the value streams.



Industrial DevOps

The image features a dark blue background with white, wavy, grid-like lines that create a sense of depth and movement. Two small orange triangles are positioned on the right side, one near the top and one near the bottom, pointing towards the center. The overall aesthetic is modern and technical.

Current Thinking and Purpose



- ▶ Support business agility for those building cyber-physical systems
- ▶ Incorporate the latest Lean-Agile guidance hardware systems who have uncertainty coupled with high cost-of-change
- ▶ Connect Lean-Agile practices to the broader engineering and science disciplines that build these systems including electrical, mechanical, optics, fluids, space, propulsion, etc.
- ▶ Reduce the barriers for these engineers to join Agile teams and ARTs

'Standing on the Shoulders of Giants'

Industrial DevOps is the application of continuous delivery and DevOps principles to the development, manufacturing, deployment, and serviceability of significant cyber-physical systems to enable these programs to be more responsive to changing needs while reducing lead times.

► Part of Gene Kim's Enterprise Summit

- 2018 – Defined IDO principles
- 2019 – Applied the IDO principles
- 2020 – System and cultural contexts



Download at <https://itrevolution.com/>

SAFe for Hardware Teams Course Structure (latest)

- ▶ **Ensuring hardware development enables Business Agility**
Business agility requires innovative products that quickly respond to changing markets and emerging opportunities, including hardware
- ▶ **Organizing around value for hardware development**
Hardware development is part of a larger, highly innovative solution where success requires alignment and coordination to make delivery more predictable.
- ▶ **Assume Variability; Preserve Options**
Leave design options open and converge at the last responsible moment to produce more optimal technical and economic outcomes
- ▶ **Build incrementally with fast learning cycles**
Integrate the end-to-end system to validate assumptions sooner, continuously assesses product feasibility, and reduce risk
- ▶ **Perform work in small batches**
Small batches flow through development quickly which fosters faster learning
- ▶ **Build-in quality for hardware**
Proactively build quality in to deliver faster, more predictably, and with higher quality

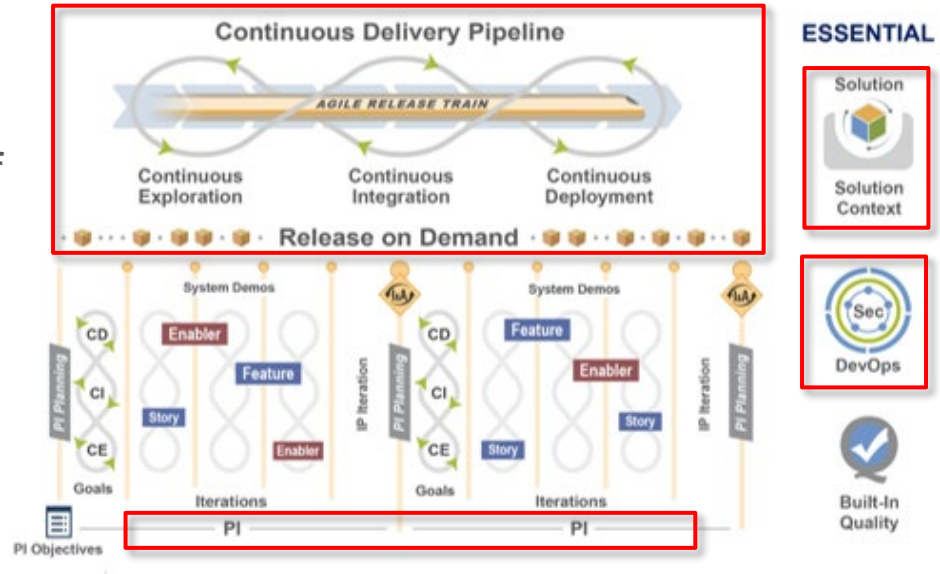


Continuous Delivery and DevSecOps

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Current Thinking and Purpose

- ▶ Emphasizing *Release on Demand* as an ongoing activity
- ▶ Emphasize the *continuous* nature of the CDP via updated imagery
- ▶ Move away from the traditional associations of 'Program'
- ▶ Update Solution icon to integrate aspects of Design Thinking
- ▶ Creating a dedicated DevSecOps landing page and course.



DevSecOps in SAFe

- ▶ Security is not optional
- ▶ Teams need *technical* skills that implement and enable the Continuous Delivery Pipeline
- ▶ DevSecOps is complex, especially at scale
- ▶ A domain model and “Big Picture for DevSecOps” is merited



Developing the Competencies and Skills


▶ Framework guidance

- DevSecOps landing page (under construction)
- Existing content to be updated and reorganized (under construction)

▶ Training

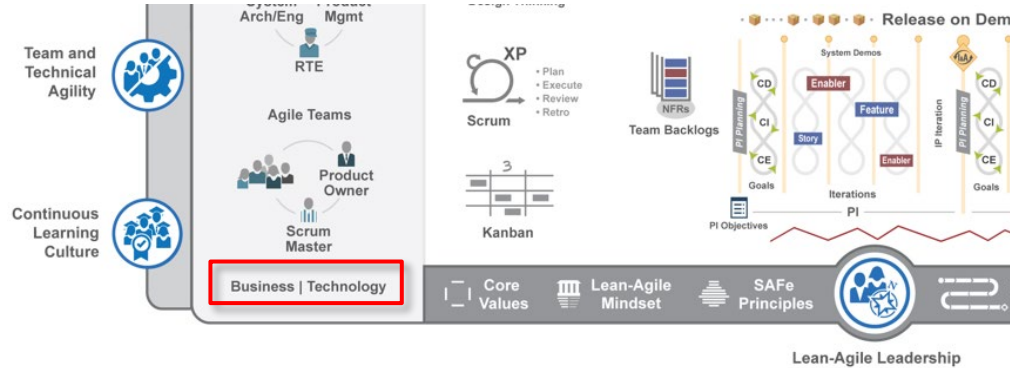
- Technical “Concept Course” in WIP
- Cloud-based CDP tech stack
- Hands-on labs
- Currently in pre-alpha trials





Organizing Business and Technology teams for Success

Current Thinking and Purpose

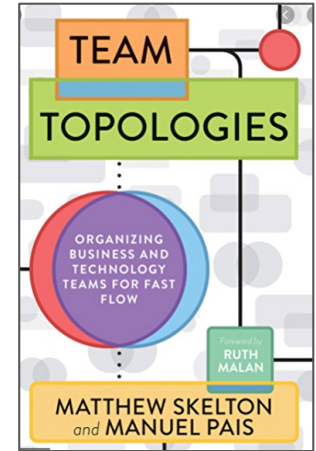


- ▶ Provide effective team organization patterns for improved ART outcomes
- ▶ A source of practical guidance for a business teams e.g. Agile Marketing, Sales, HR, Legal etc
- ▶ Supported by framework articles and a workshops
- ▶ All guidance will be aligned with the *Agile Business Team Maturity Cycle* to provide a common thread

Success Patterns for Organizing Teams and ARTs

Four fundamental topologies:

- **Stream-aligned** – focus on small, independent value delivery
- **Complicated subsystem** – experts who build parts of the system requiring deep, specialist knowledge. *Not a component team.*
- **Platform** – provide service to reduce stream-aligned teams' cognitive load
- **Enabling** – experts who help bridge capability gaps (technical or solution)



Agile Marketing with SAFe

- ▶ What is driving the adoption of agility in marketing organizations.
- ▶ The three ways marketing teams can integrate with SAFe:
 - ▶ being Agile,
 - ▶ joining the value stream
 - ▶ specializing principles and practices.
- ▶ Using validated learning and hypothesis-driven approaches to optimize team and campaign performance.



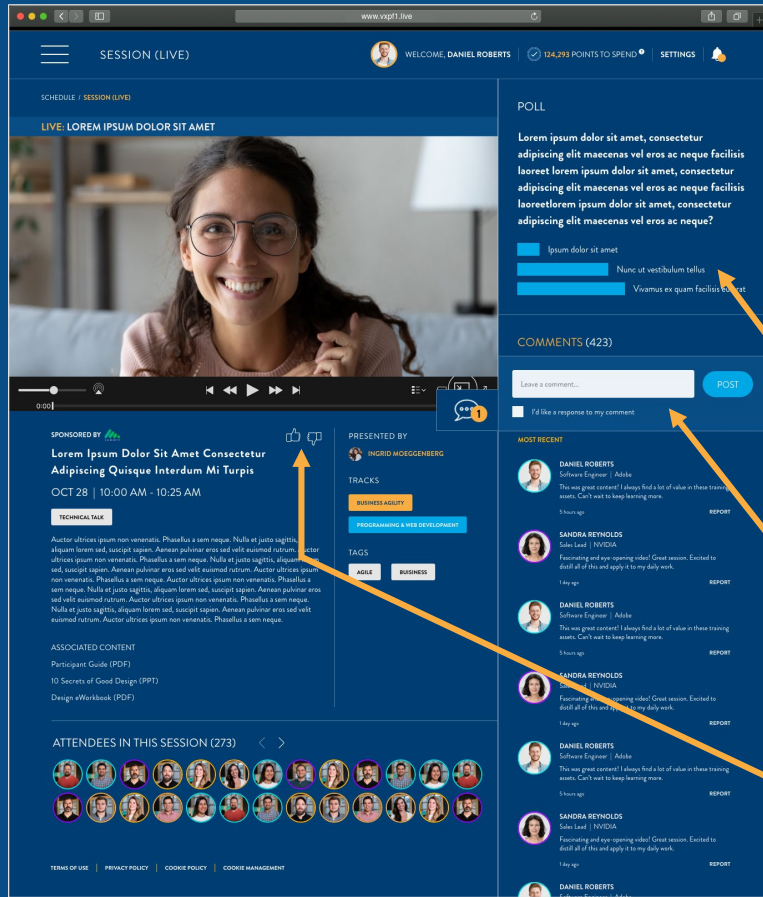
Agile Business Team Maturity Cycle

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Please refer to the agenda for scheduled times



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1

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2

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3

Thumbs up or down

Thank you!