

REQUEST TO RUN

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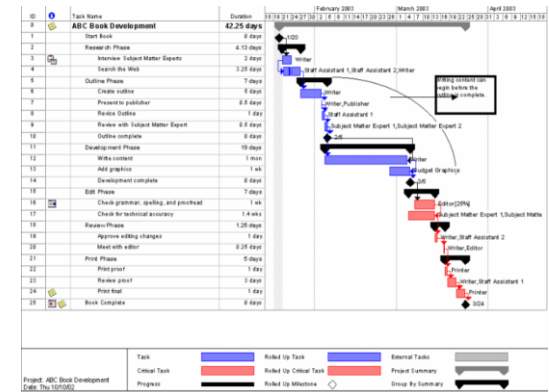
# Scaling Lean-Agile Practices Across the Enterprise

# Josh Roberts



## Electronic Data Systems

- WorldCom – Programmer
- Bank of America – PM
- Sprint – Delivery Manager
- Embarq – Delivery Manager



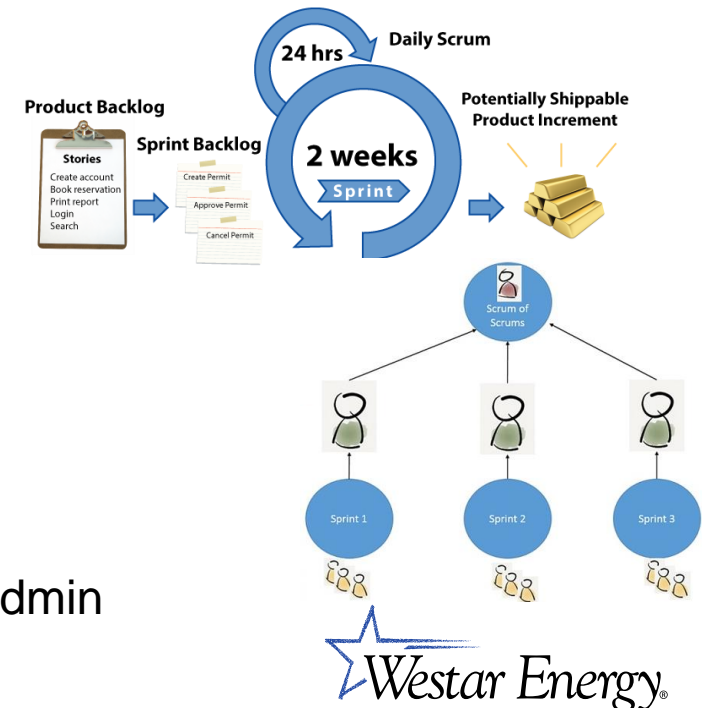
## Jack Henry & Associates

- Development Manager



## Waddell & Reed

- Development Manager



## Westar Energy

- Enterprise Agile Coach
- IT Director - PMO/QA/Admin

# Westar at a glance

- Largest electric provider in Kansas
- More than **2,400** employees
- Headquartered in Topeka





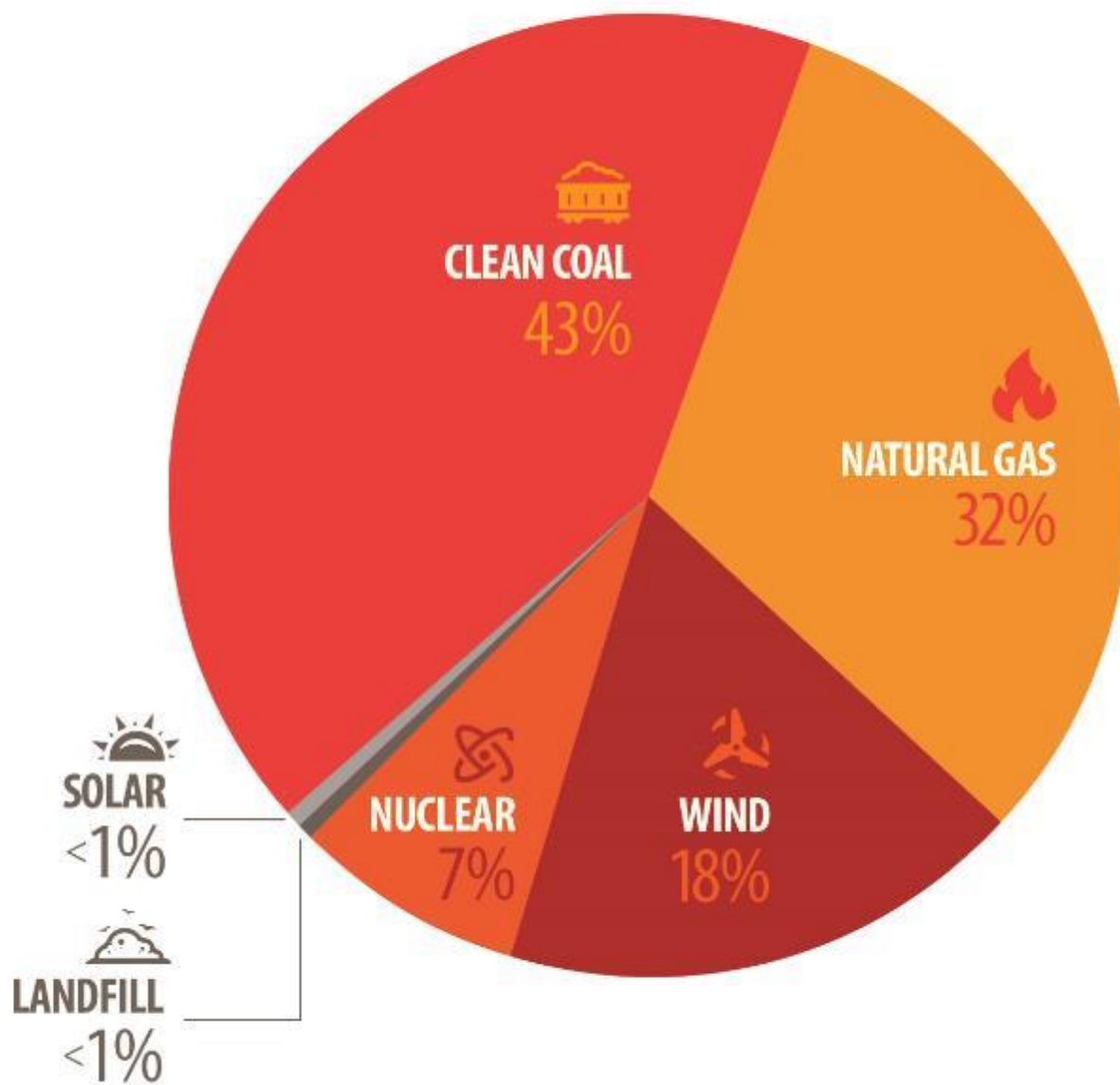
A detailed map of East-Central Kansas, showing county boundaries and names. The map is overlaid with a blue gradient that darkens towards the right side, where the text is located. Major cities like Topeka, Lawrence, and Kansas City are visible.

# Taking customers to heart

- Serving nearly **700,000** residential and business customers in east-central Kansas



# Westar's energy mix



# Agenda

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- Westar Organizational Design
- Scaling Lean-Agile Practices
- The Lean-Agile PMO
- Value Stream Mapping
- Portfolio Kanban 101
- Common Scaling Models
- Westar Lean-Agile Transformation

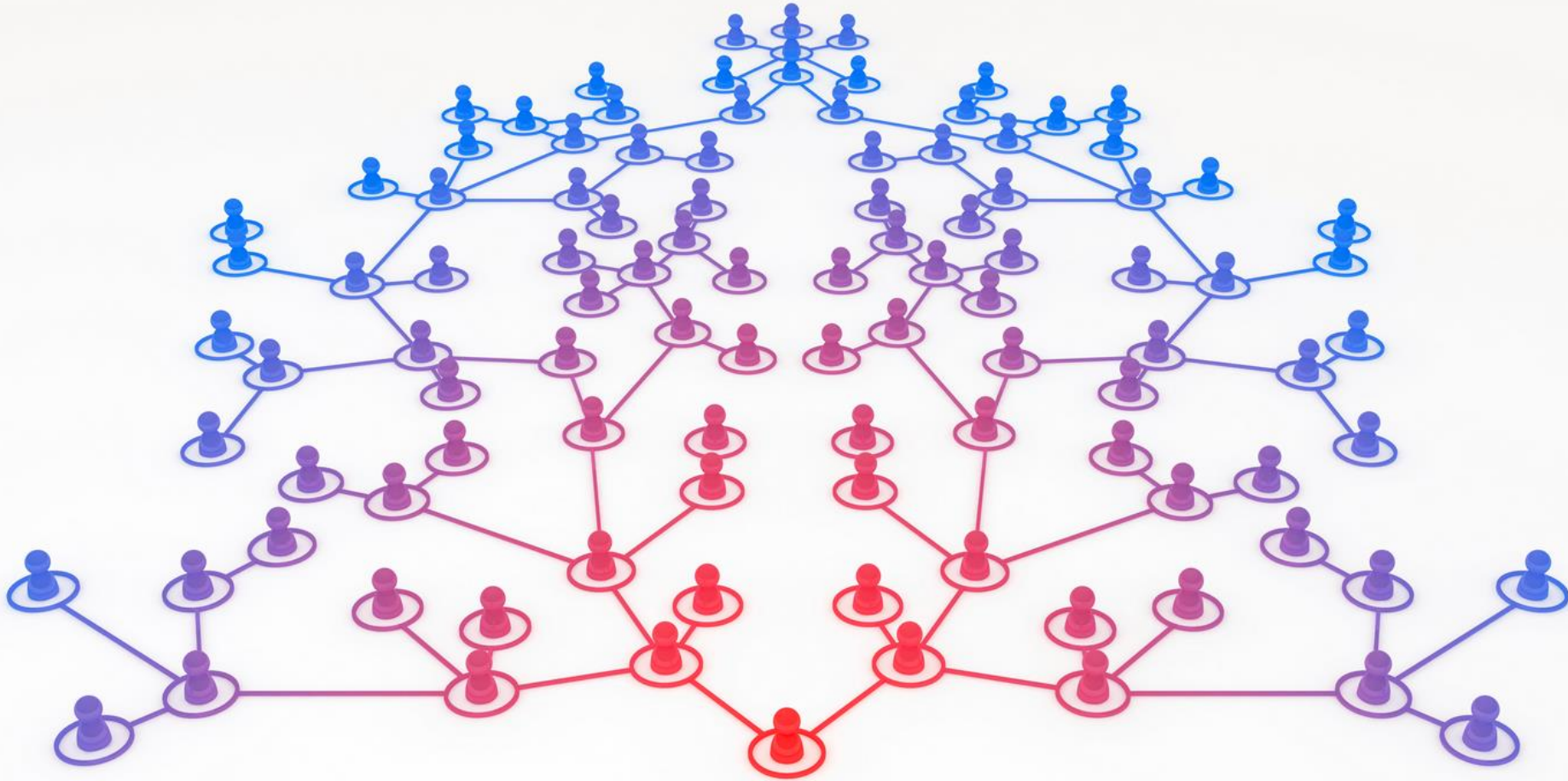


# Enterprise-Scale Agile Software Dev

- Multi-team programs of work
- Geographically disperse teams
- Wholly, or partially, outsourced work
- Shared resources (Arch, DBA, ETL, etc.)
- Core business may not be software



# Enterprise-Scale Agile Software Dev

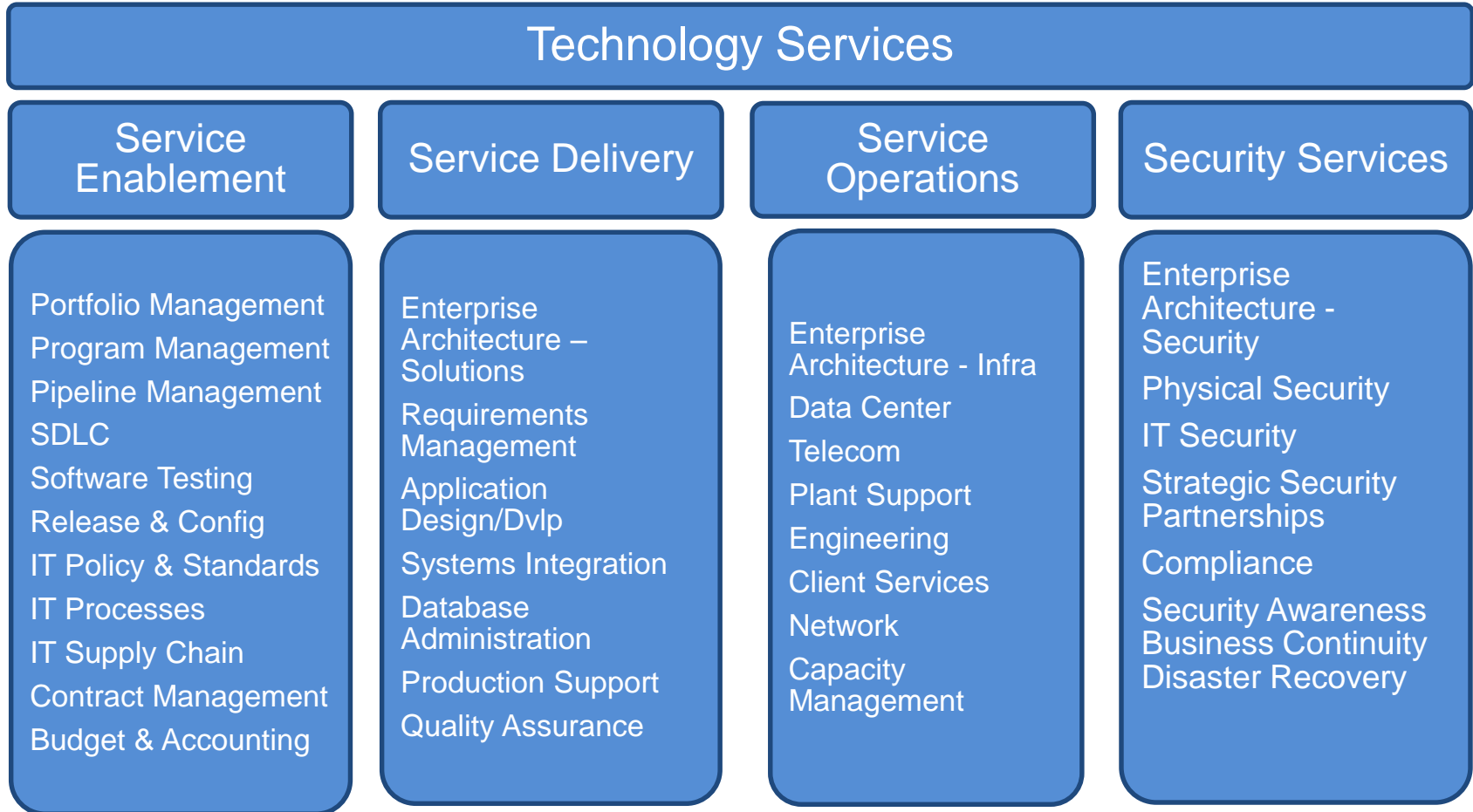


TAKING **SCALE** TO HEART

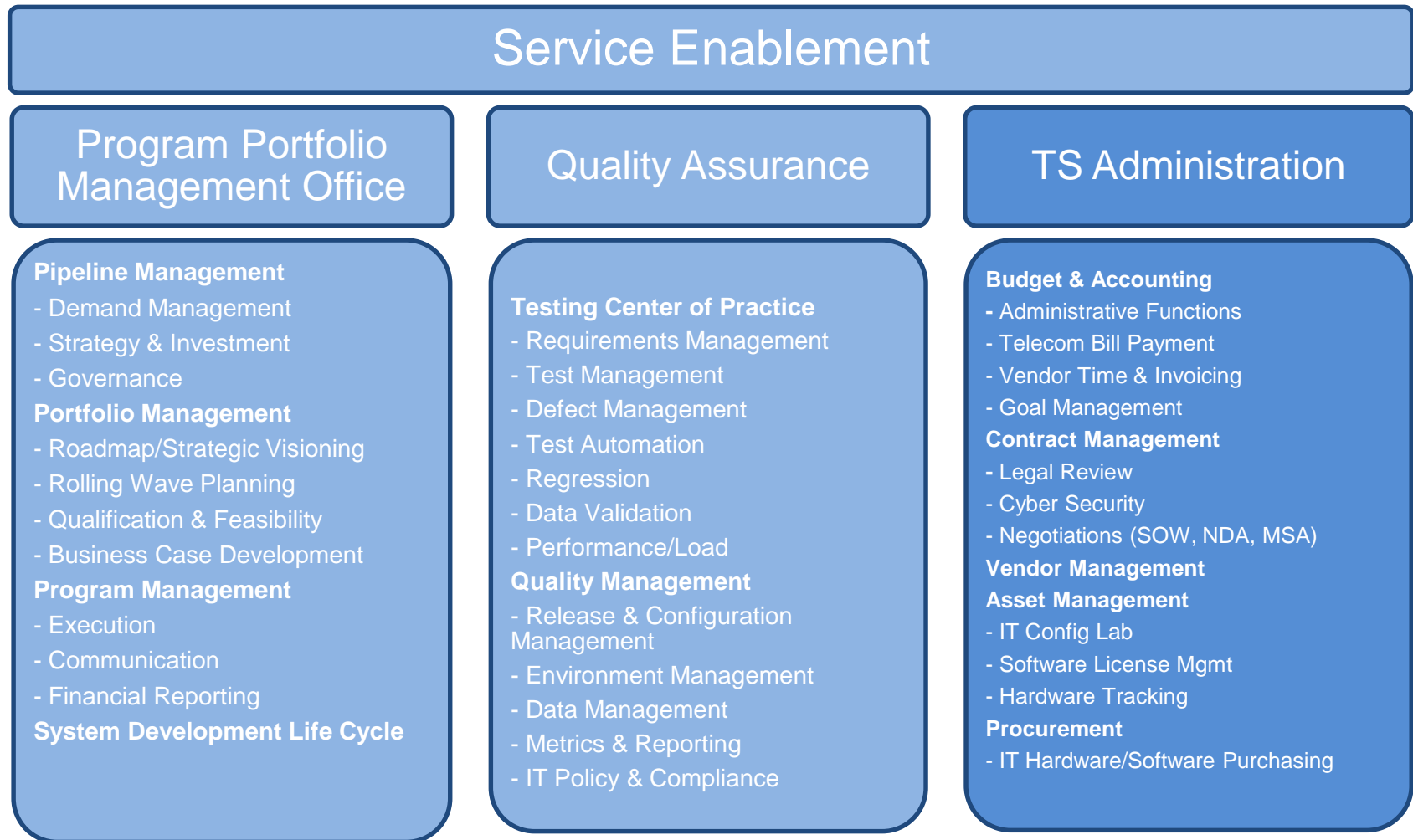




# Our IT organization



# The Service Enablement Department



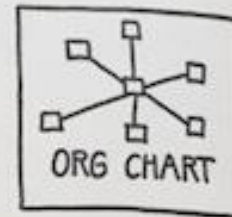


# CHANGE FOR THE SAKE OF PROMOTION

YOU WILL APPEAR TO BE A VISIONARY PLANNER IF YOU DECENTRALIZE EVERYTHING WHICH IS CENTRALIZED AND CENTRALIZE EVERYTHING WHICH IS DECENTRALIZED.

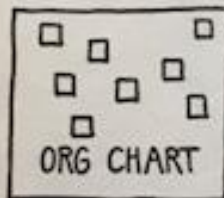


WE'VE GOT TO DECENTRALIZE TO REMOVE THE BOTTLENECKS.



ONE YEAR LATER

WE'VE GOT TO CENTRALIZE TO BE MORE EFFICIENT.



THE MAN IS A MANAGEMENT GENIUS.



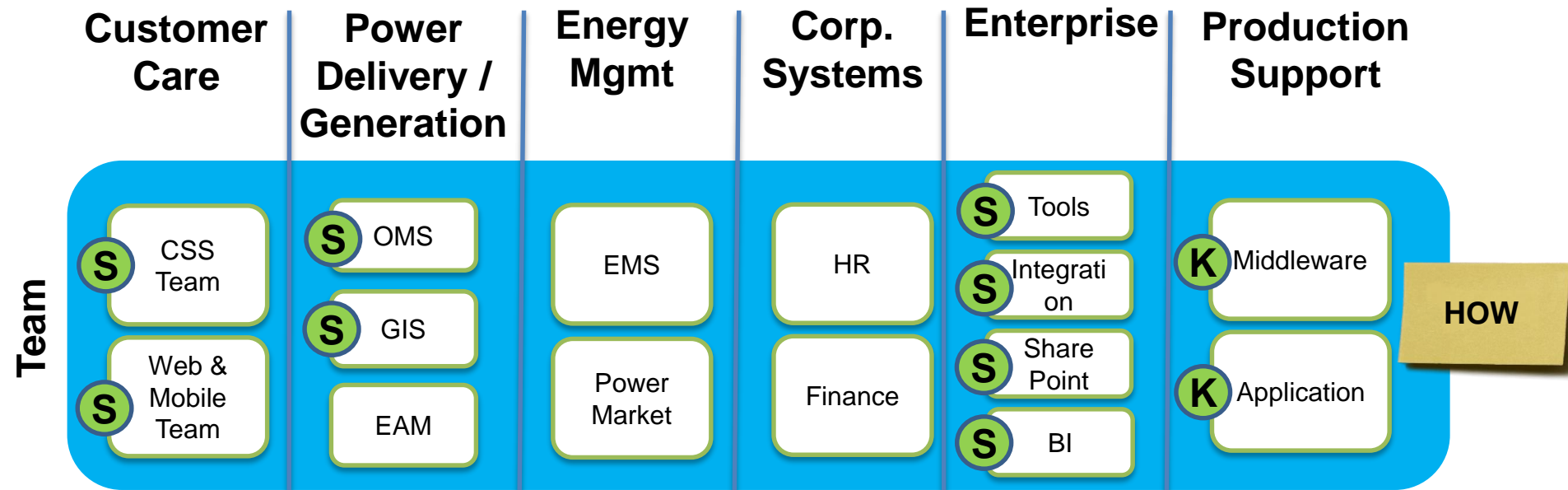
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# Centralized Strategy, Local Execution



# A team foundation

## 15 Scrum (S) & Kanban (K) Teams...



# The “HOW”

---

**#4** - Business people and developers must **work together daily** throughout the project.

**#5** - Build projects around **motivated individuals**.  
Give them the environment and support they need, and **trust them** to get the job done.

**#9** - Continuous attention to **technical excellence** and good design enhances agility.

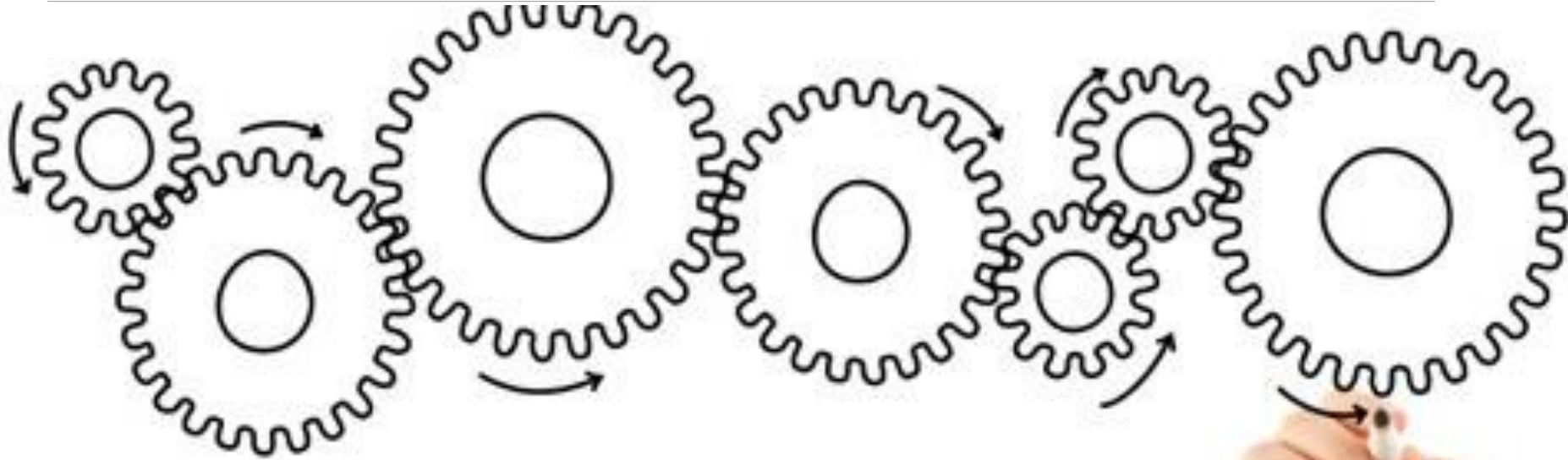
**#11** - The best architectures, requirements, & designs emerge from **self-organizing teams**.

# Agile team practices





# Agile team practices lack

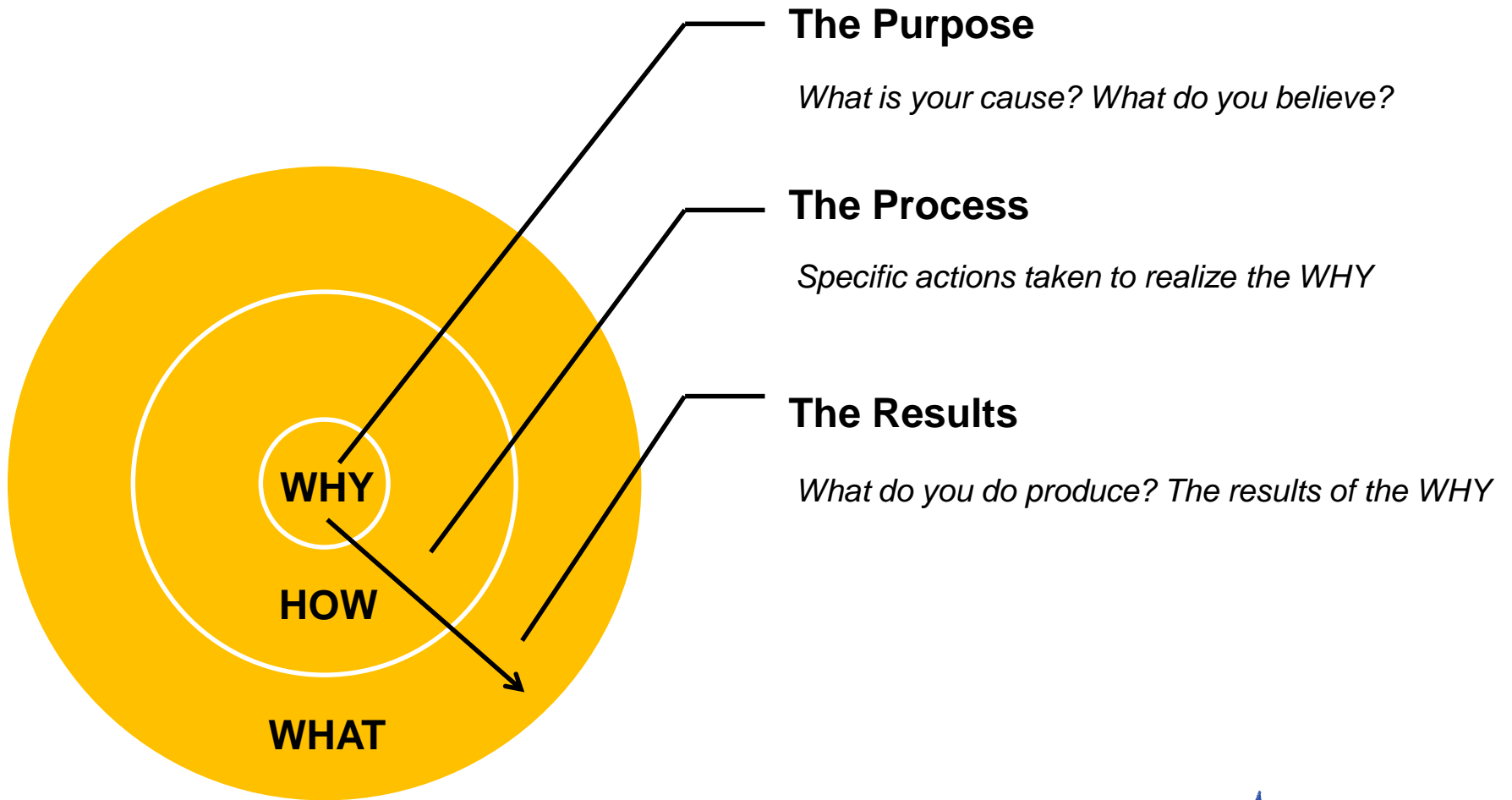


- **Strategic Alignment**
- **Economic Decision-Making**
- **Enterprise Value Streams**
- **Product Vision and Roadmap**

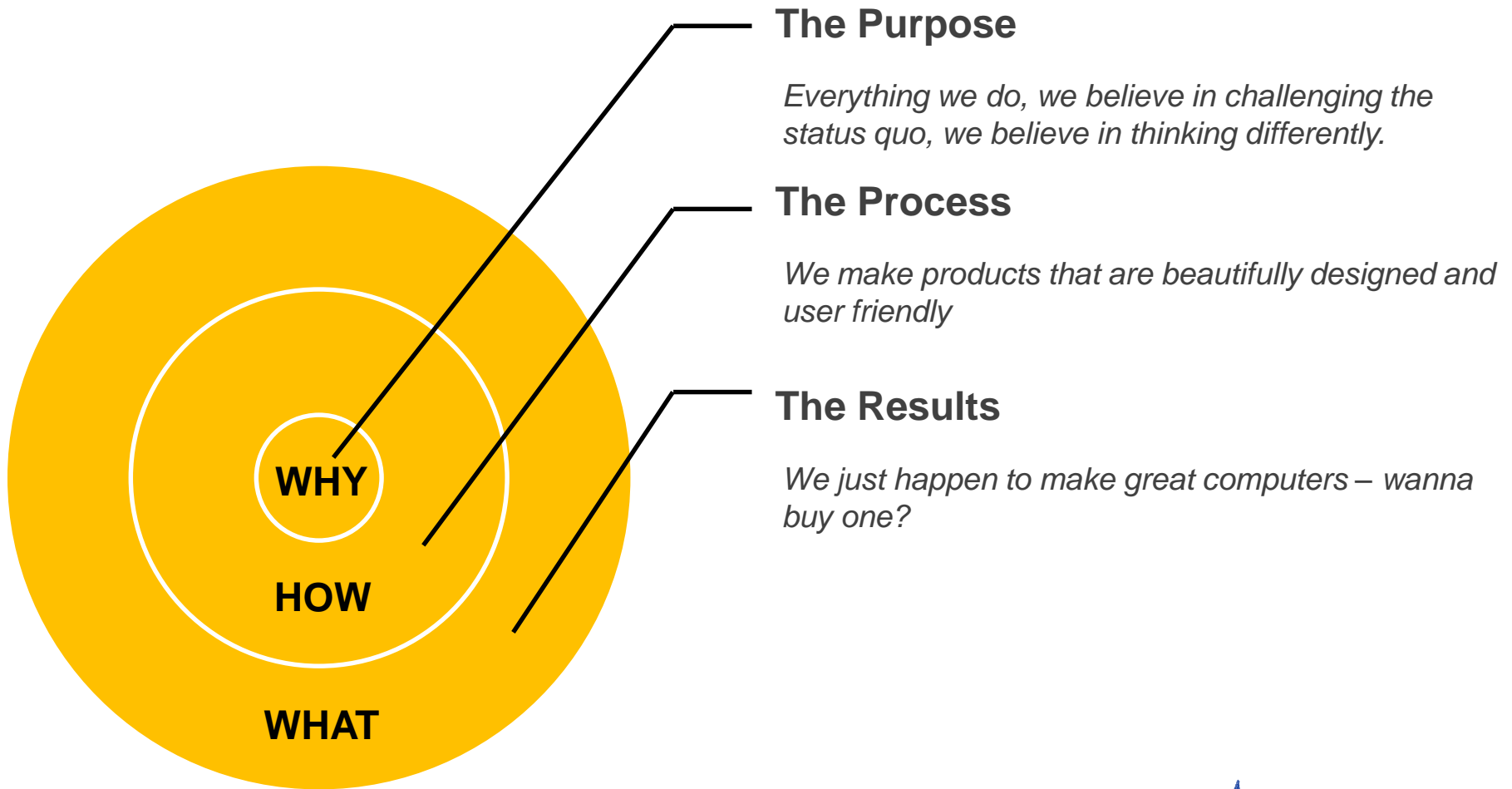
# Whole system thinking



# The Golden Circle



# Can you guess the company?



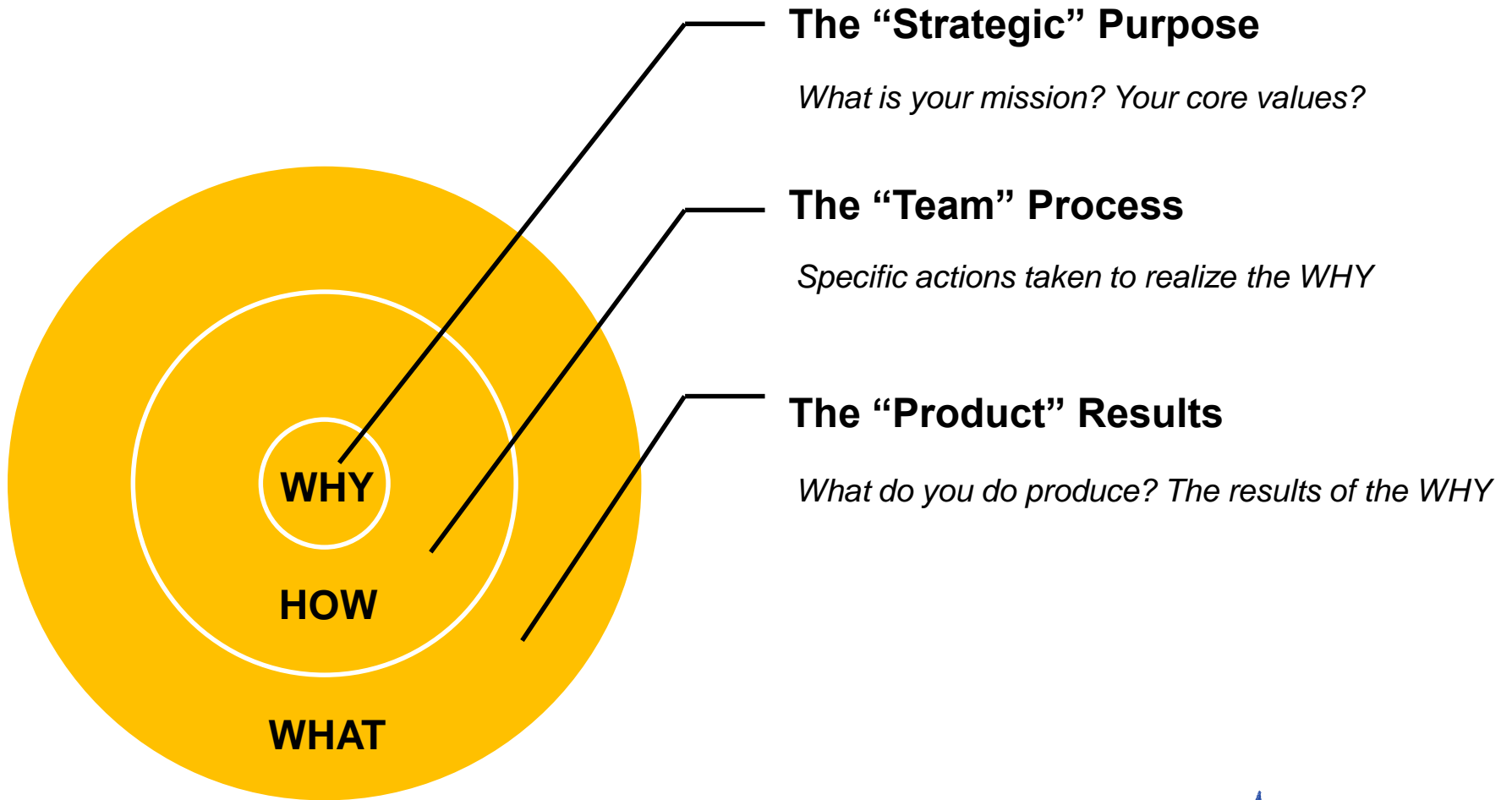
TAKING **SCALE** TO HEART

Source: Simon Sinek, 2009 TED Talk

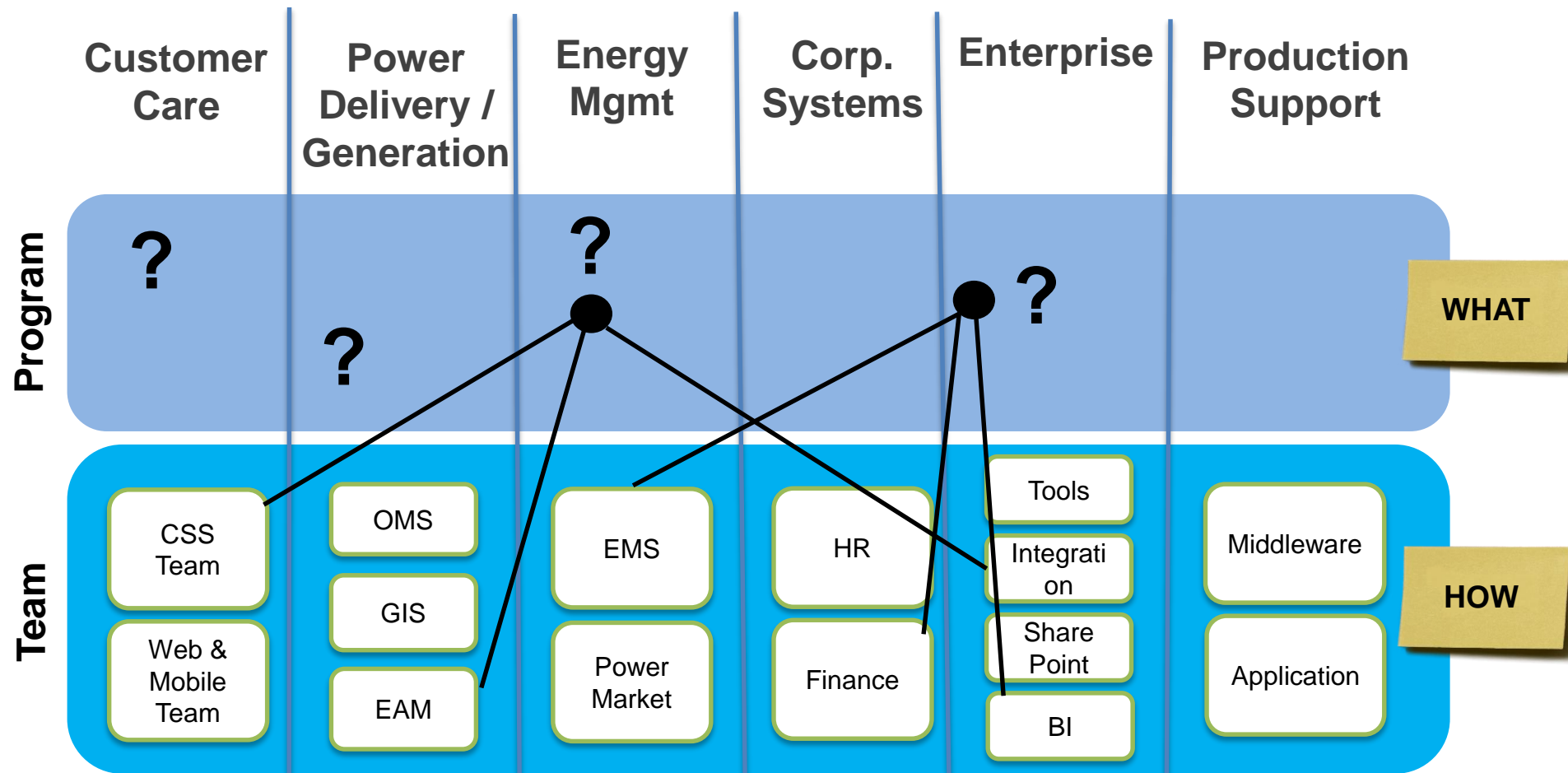




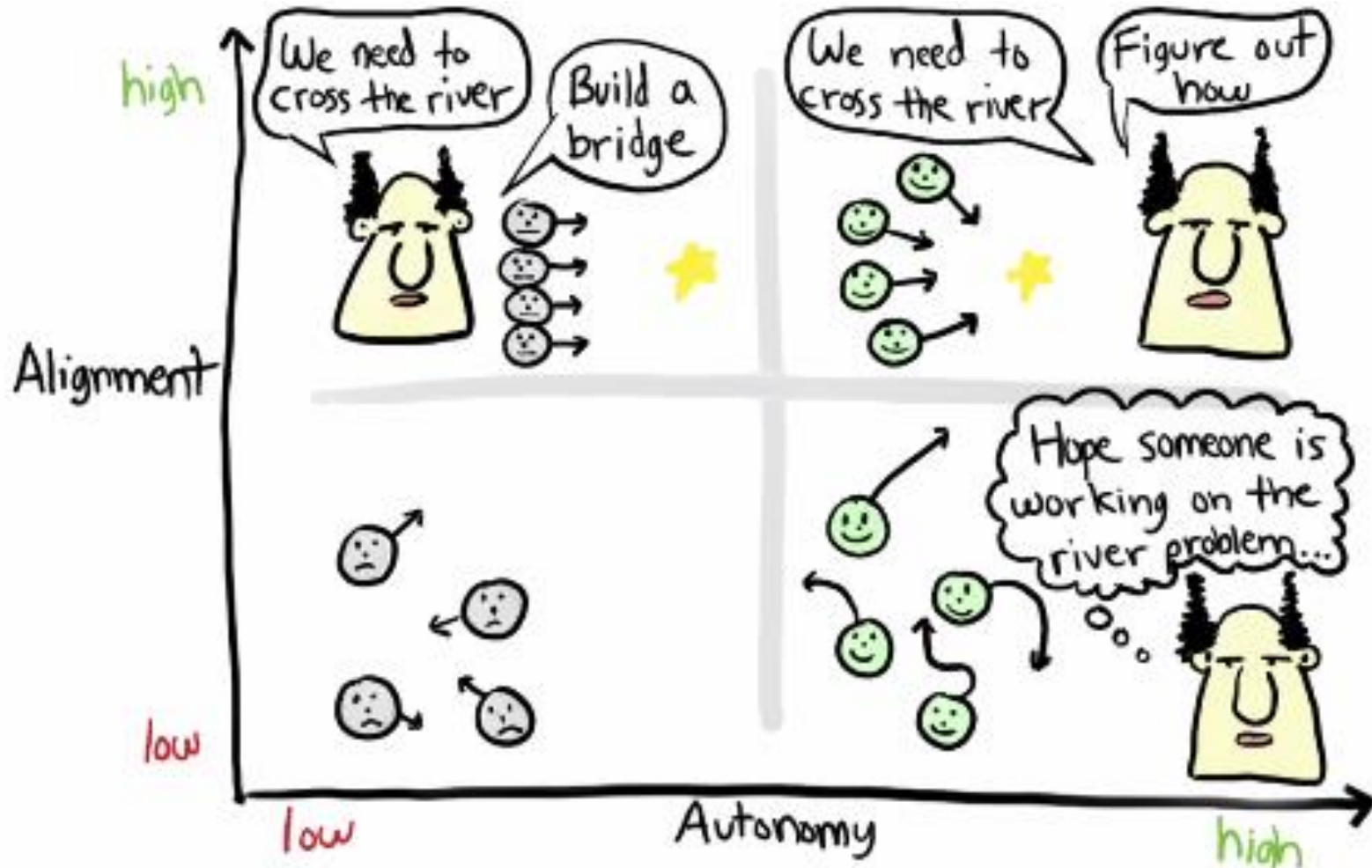
# The Golden Circle



# Where teams struggle

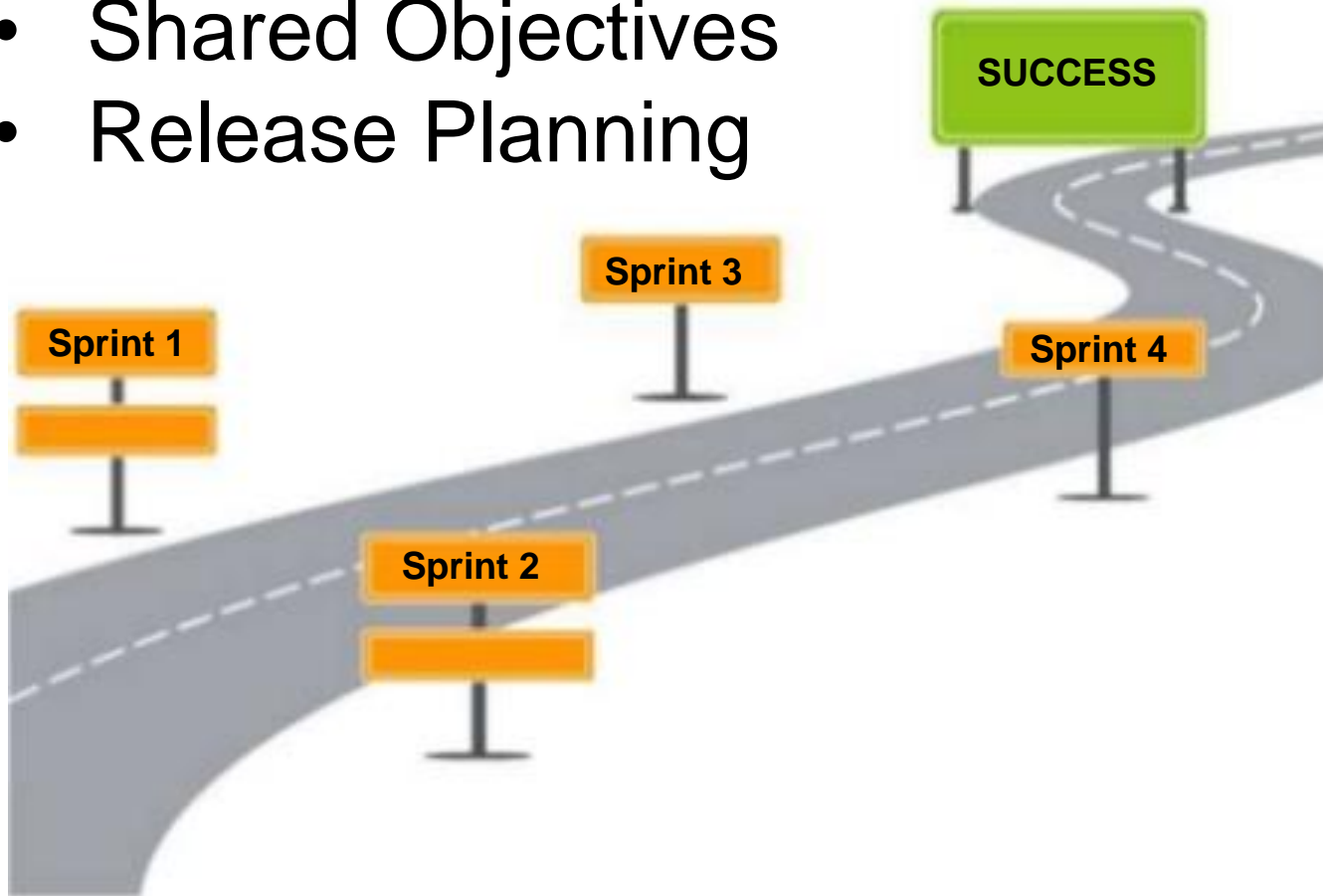


# Autonomy requires alignment



# The “WHAT”

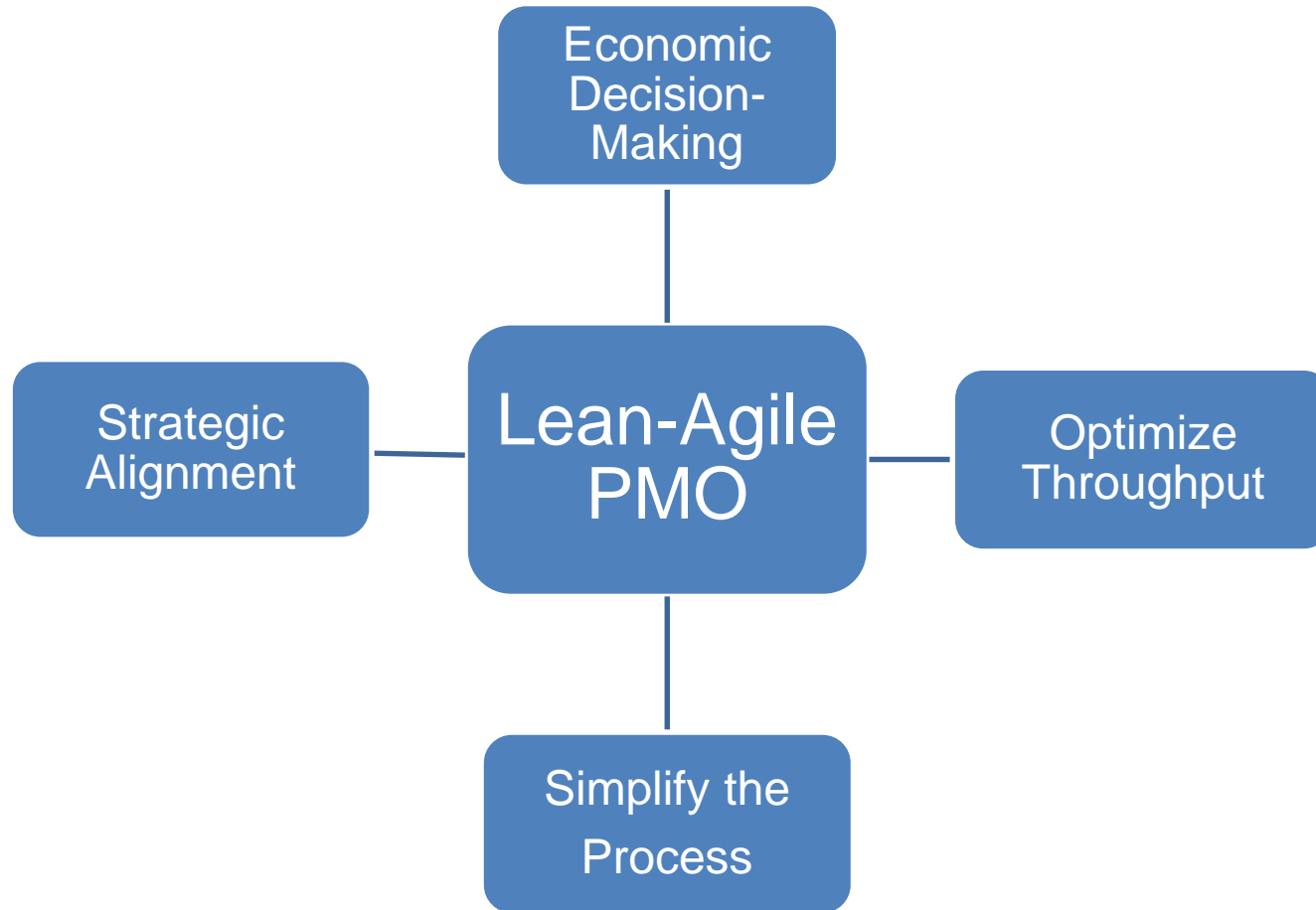
- Product Vision & Roadmap
- Shared Objectives
- Release Planning





# A Lean-Agile PMO

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# Legacy PMO mindsets

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- **Widget engineering**

*“Draw it up, and build it like you drew it”*

- **Order-taker mentality**

*“You build, what we tell you to build”*

- **Maximize utilization**

*“The more we start, the more we finish”*

- **Control through milestones**

*“If we still can’t tell where we are, we’ll just ask for more detailed data”*

- **We can plan a full year of projects**

*“If we only planned in more detail, we could really get it right this year.”*

- **Just get it done**

*“This is the plan ‘we’ agreed to; now execute it”*

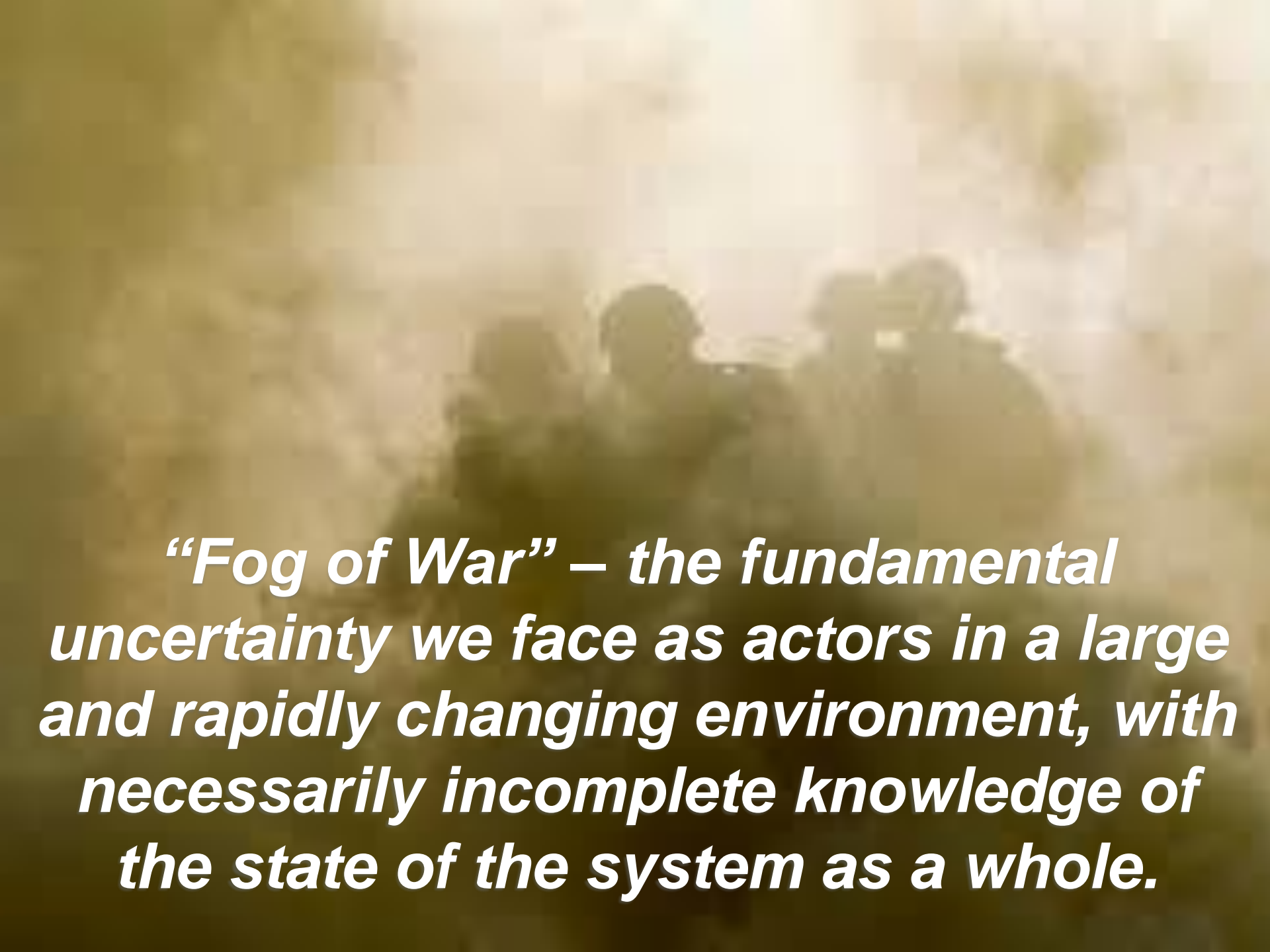
# Your PMO should enable the teams

“No battle plan ever survives contact with the enemy.”

***Helmuth von Moltke the Elder***  
*Prussian general*  
*born October 26, 1800*

Dobson's Improbable Quote of the Day

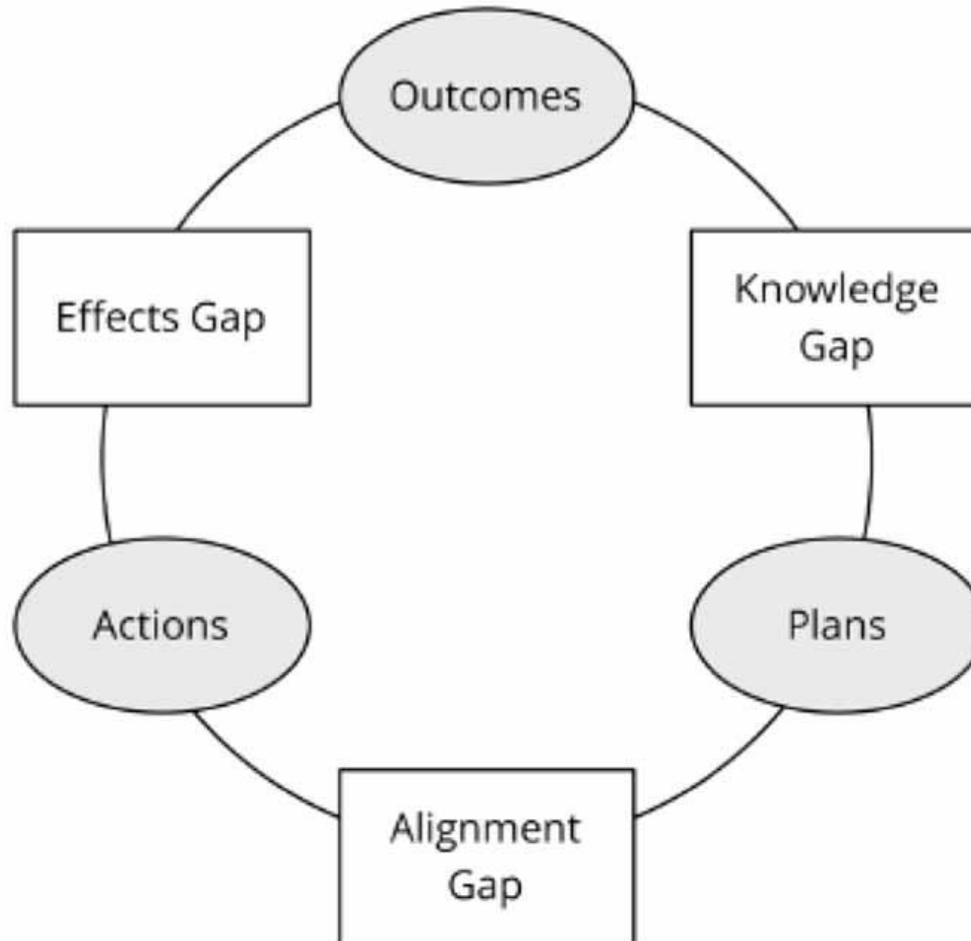


A blurry, sepia-toned photograph of soldiers in a field, illustrating the 'Fog of War'. The image is out of focus, showing the silhouettes of soldiers in a hazy, yellowish-brown environment. The text is overlaid on the lower half of the image.

***“Fog of War” – the fundamental uncertainty we face as actors in a large and rapidly changing environment, with necessarily incomplete knowledge of the state of the system as a whole.***



# Complex Adaptive Systems & Friction



# Mission Command vs. Command & Control

## The three gaps, and how to manage them

	Effects gap	Knowledge gap	Alignment gap
What is it?	The difference between what we expect our actions to achieve and what they actually achieve	The difference between what we would like to know and what we actually know	The difference between what we want people to do and what they actually do
Scientific management remedy	More detailed controls	More detailed information	More detailed instructions
<b>Mission command remedy</b>	Everyone retains freedom of decisions and action within bounds	Do not command more than is necessary or plan beyond the circumstances you can foresee	Communicate to every unit as much of the higher intent as is necessary to achieve the purpose
Directed opportunism remedy	Give individuals freedom to adjust their actions in line with intent	Limit direction to defining and communicating the intent	Allow each level to define how they will achieve the intent of the next level up, and 'backbrief'

# Our PMO's mission

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## Principle of Mission

- we create alignment not by making a detailed plan of how we achieve our objectives but by describing the **intent** of our mission and **communicating why** we are undertaking it.

- Donald Reinertsen,  
*The Principles of Product Development Flow*

# Value Stream Mapping

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## Simplify the Process

- Reduce wasteful activities
- Reduce wait times

## Optimize Throughput

- Reduce variation (one piece flow)
- Identify constraints



# Value Stream

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A value stream describes the steps used to provide a **continuous flow** of a specific kind **of value** to the customer

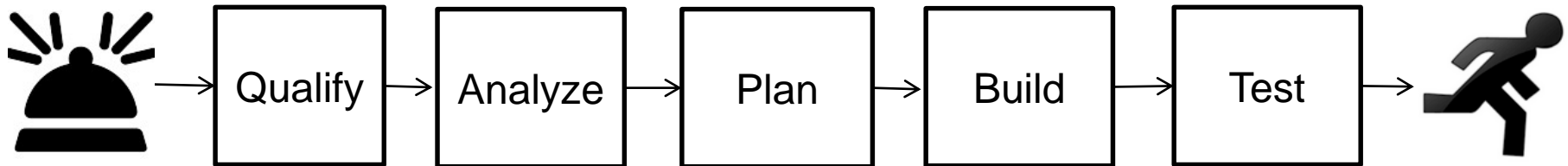




# Request to Run

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**The “stream” of activities and skills, required to qualify, analyze, plan, build and deploy a technology service into production that delivers business “value”.**

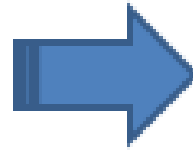


# Our value stream

Portfolio Strategy Planning

Portfolio Planning Kanban Wall

Request



Portfolio Execution Tracking Wall

Run

Portfolio Review & Retrospective

# Our value stream

WHY

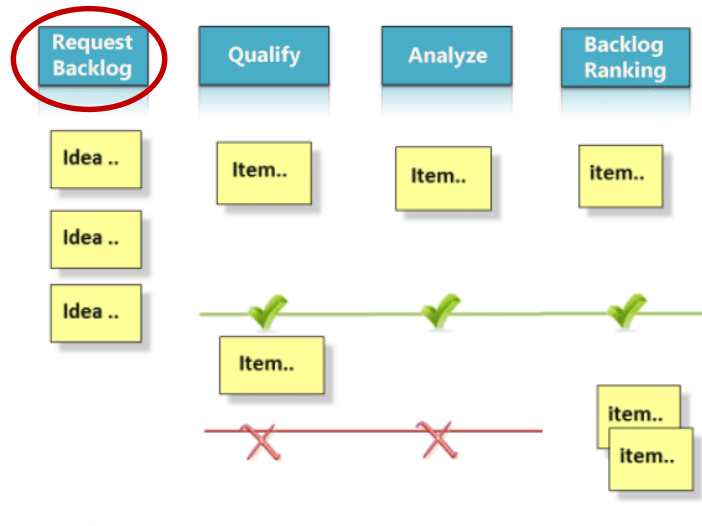
WHAT

WHEN

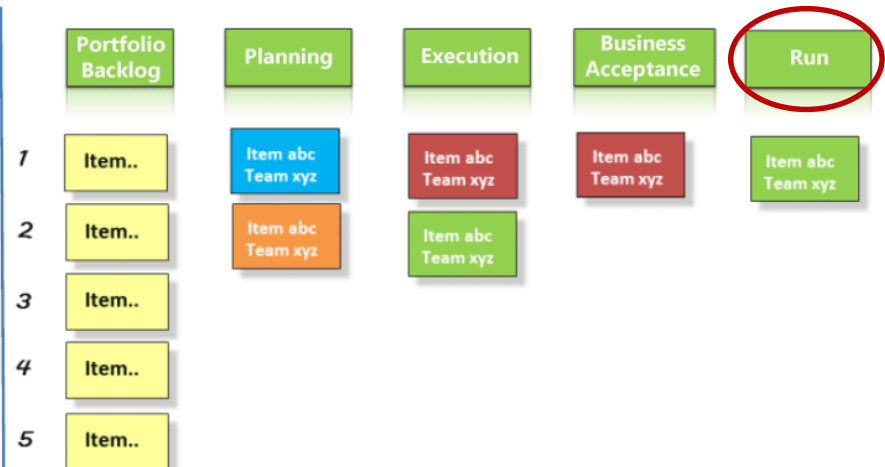
HOW

Portfolio Strategy Planning

## Portfolio Planning Kanban Wall



## Portfolio Execution Tracking Wall



Portfolio Review &amp; Retrospective

TAKING **SCALE** TO HEART



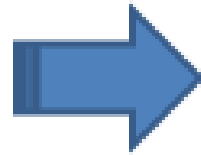
Source: Adapted from Agile Transformation, Inc.

# Our value stream

Portfolio Strategy Planning

Portfolio Planning Kanban Wall

Building  
the Right  
Things



Portfolio Execution Tracking Wall

Building  
Things  
Right

Portfolio Review & Retrospective

The Funnel Effect



WHY

WHAT

WHEN

HOW

REQUESTS

APPROVED  
for  
QUALIFY

QUALIFY

DOING

DONE

APPROVED  
for  
ANALYZE

ANALYZE

DOING

DONE

APPROVED  
for  
IMPLEMENTATION

PLANNING & REQUIREMENTS

DOING

DONE

DESIGN

EXECUTION

BUILD

QA

BUSINESS  
ACCEPTANCE

RUN

PROJECTS

FEATURES



WHY

WHAT

APPROVED  
for  
QUALIFY

QUALIFY

APPROVED  
for  
ANALYZE

## ANALYZE

APPROVED  
for  
IMPLEMENTATION

[illegible]

DUTY LOG  
 Name Automation  
 CORP COMMUNICATIONS  
 → Power Replacement  
 Local On Guard  
 (Boulder Replacement)

[illegible][illegible]

Rate Case

**Crew Callout Replacement**

**C3 Governor Adjustment Dash board**

**Heavy 2 1/2 Changes**

**Control Plan**

**Heavy Engine Change**

**New Commercial Rates**

**Ref Rate All/All Changes**

**Sales Weekly for All Customers 1987's**

**1988 Remodeling in Long Customers**

**1988 Replacement with Service**

**1988 Replacement Servicing**

# PROJECTS

## FEATURES



# WHEN

# HOW

## PLANNING & REQUIREMENTS

### DOING

### DONE

**POWER DELIVERY**  
TOA Phase IV

**POWER DELIVERY**  
EAM

**CUSTOMER CASE**  
IVR Replacement

**CUSTOMER CASE**  
Update Long Island

**CUSTOMER CASE**  
EAM Integration

**POWER DELIVERY**  
TOA Phase III

**POWER DELIVERY**  
TOA Phase III

**POWER DELIVERY**  
TOA Phase III

**POWER DELIVERY**  
TOA Phase III

**POWER DELIVERY**  
TOA Phase III

**POWER DELIVERY**  
TOA Phase III

**POWER DELIVERY**  
TOA Phase III

## EXECUTION

### BUILD

### QA

## BUSINESS ACCEPTANCE

### RUN

**POWER DELIVERY**  
TOA Phase IV

**POWER DELIVERY**  
EAM

**POWER DELIVERY**  
ARMS Scheduler  
Logica Upgrade

**POWER DELIVERY**  
Enterprise Data  
Warehouse

**POWER DELIVERY**  
OMS Upgrade 9.3

**POWER DELIVERY**  
TOA Phase III

**POWER DELIVERY**  
TOA Phase III

**POWER DELIVERY**  
TOA Phase III

**POWER DELIVERY**  
TOA Phase III

**POWER DELIVERY**  
TOA Phase III

### DONE

### DOING

**POWER DELIVERY**  
TOA Phase III

**POWER DELIVERY**  
TOA Phase III

**POWER DELIVERY**  
TOA Phase III

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TOA Phase III

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TOA Phase III

**POWER DELIVERY**  
TOA Phase III

**POWER DELIVERY**  
TOA Phase III

Portfolio Kanban  
is not about choosing  
the work you do;  
it's about choosing the  
work you don't do



# The Funnel Effect

Just the right amount of water can go through as fast as it's put into the funnel.



But add extra water to the funnel and the whole thing backs up.

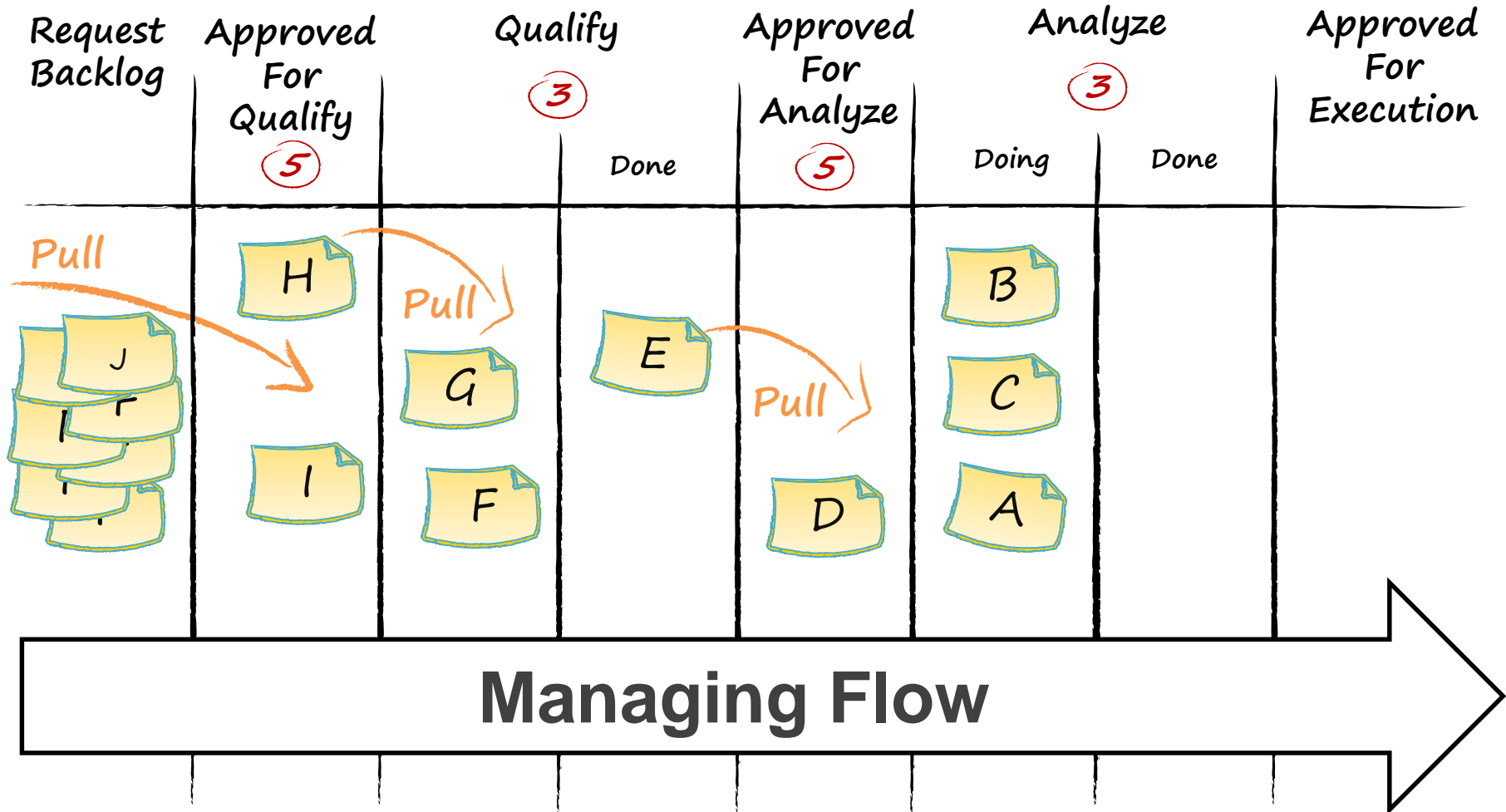




All systems have a natural velocity...



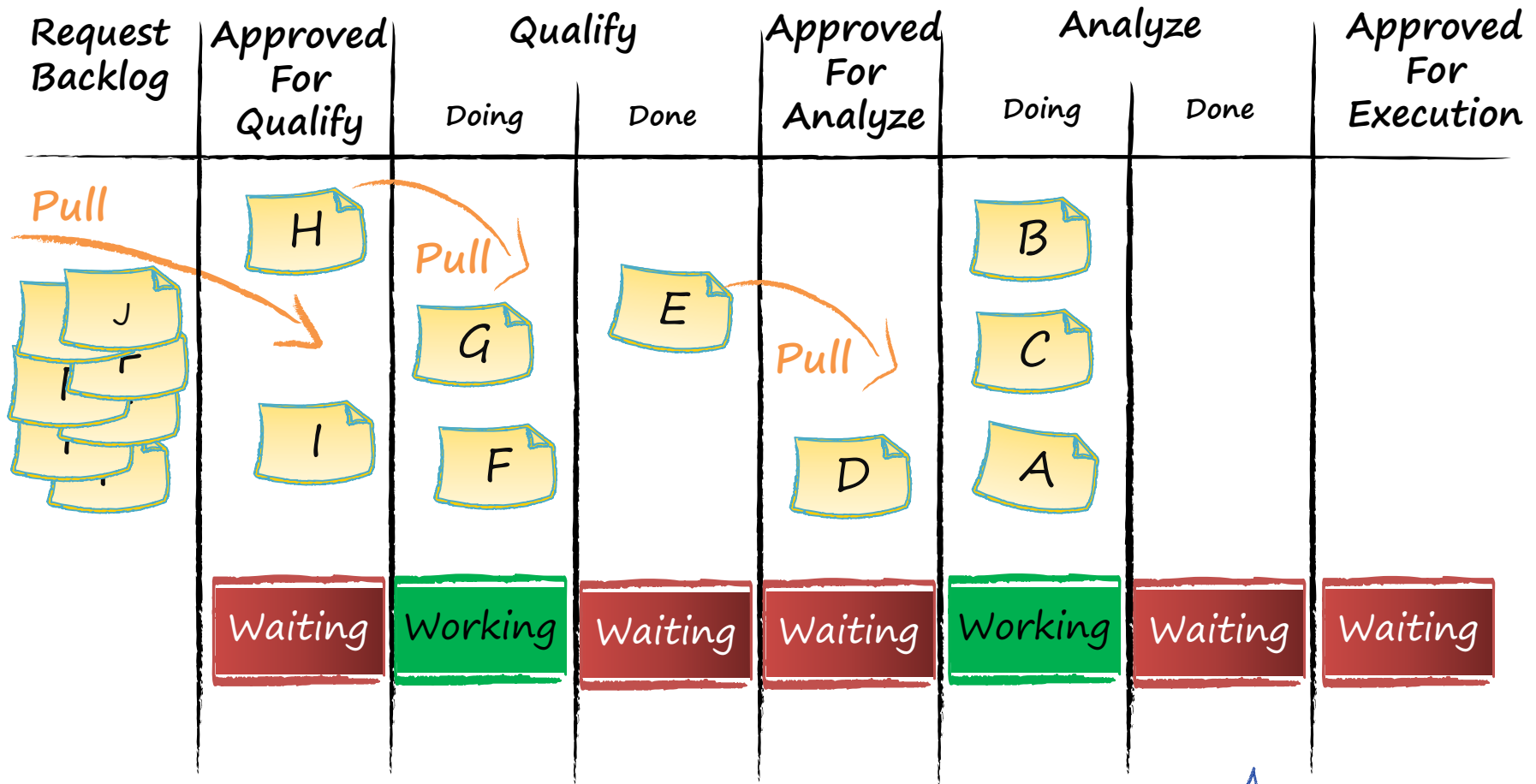
# From Managing Congestion to ...



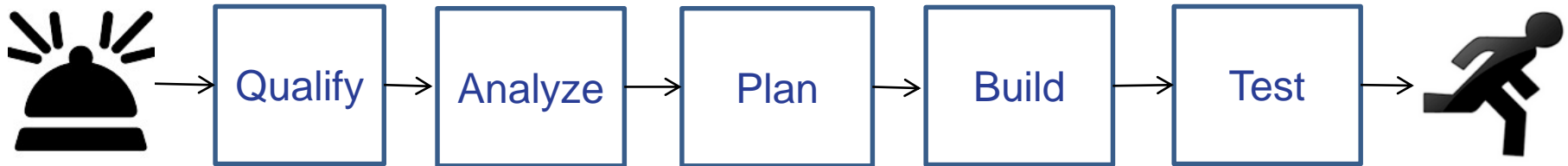


# Reduce wait times

## Portfolio Planning Kanban



# Reduce wasteful activities

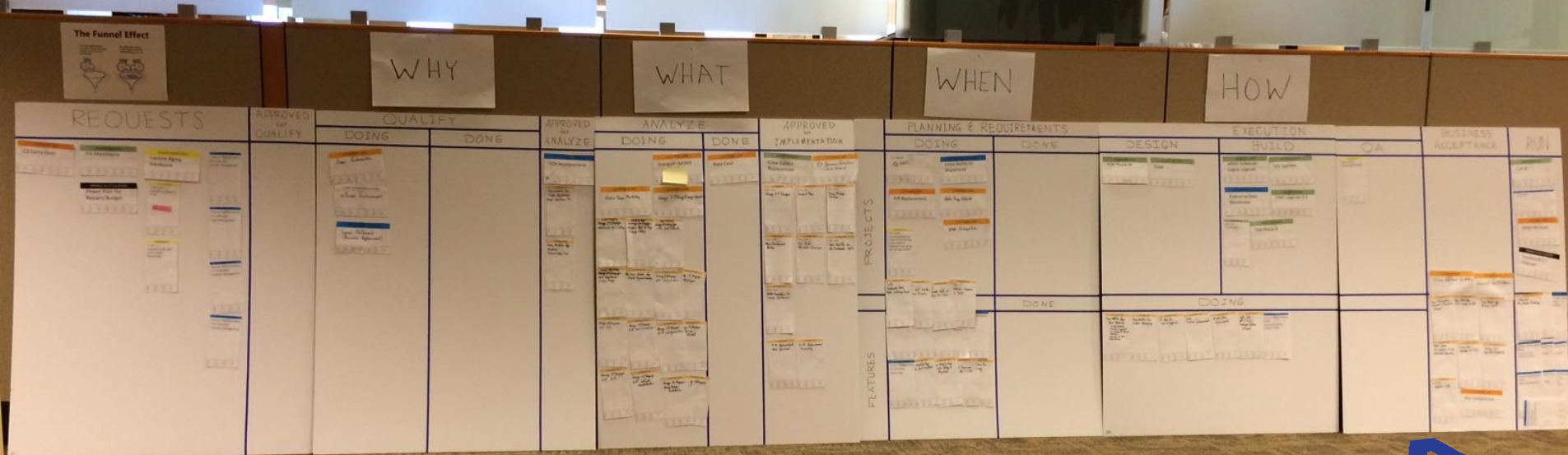


<b>Waste</b>	2d	4wk	3wk	6wk	2wk	8wk	4wk	1wk	3wk	2wk
<b>Value</b>	2h	1wk	1wk	1wk	2wk	2wk	1wk	1wk	1wk	1wk

$$\frac{6 \text{ wk value-add time}}{39.4 \text{ wk cycle time}} = 15\%$$
 Process Cycle Efficiency

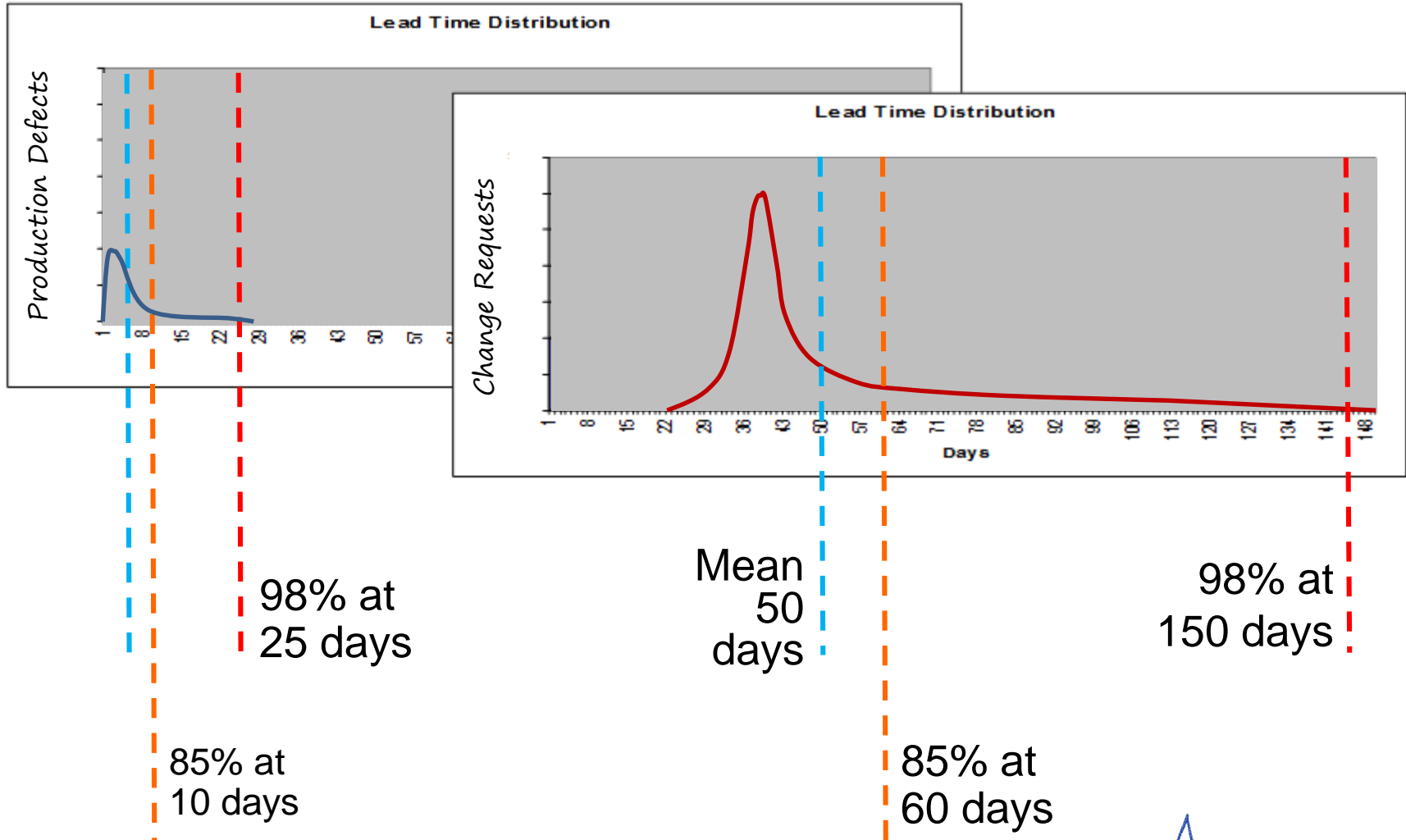
Improve team efficiency 10%  
yields a 1.5% improvement

Eliminate 10% waste  
yields 8.5% improvement



Lead time

# Lead time = probabilistic management

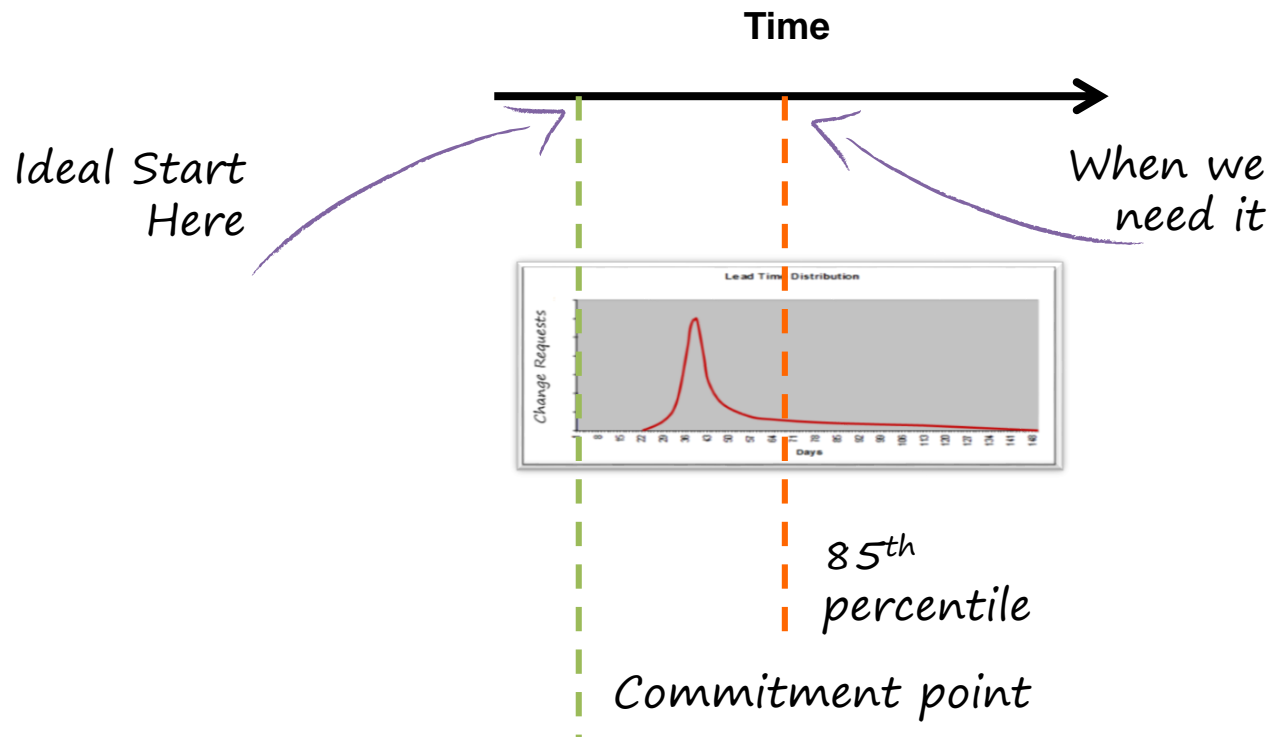


TAKING SCALE TO HEART

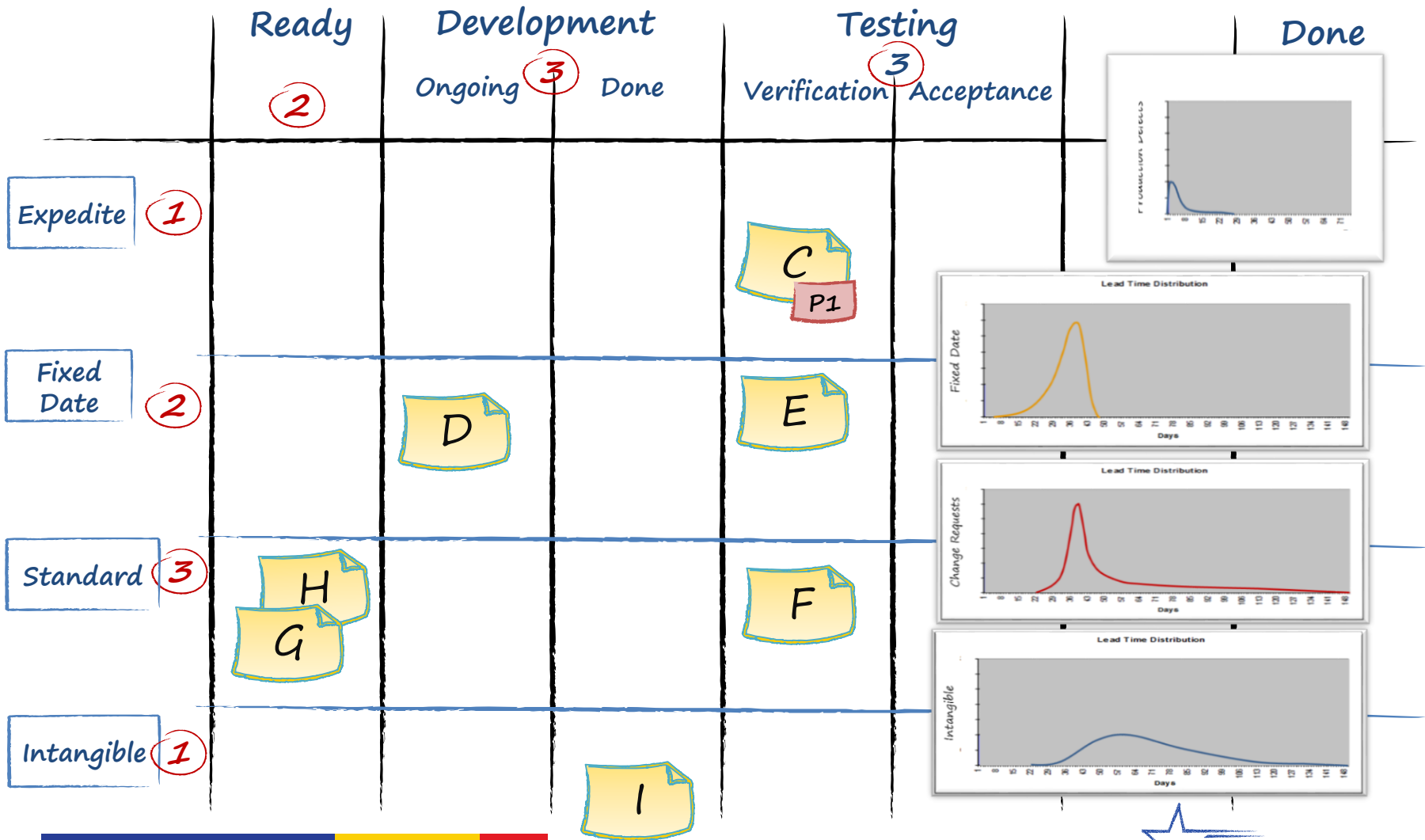
Source: David J Anderson & Associates, Inc.



# When should we start?



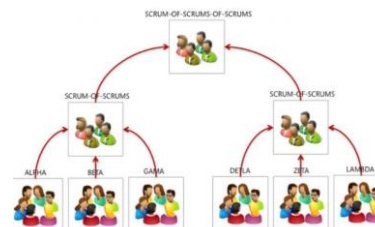
# Allocating capacity to types of work



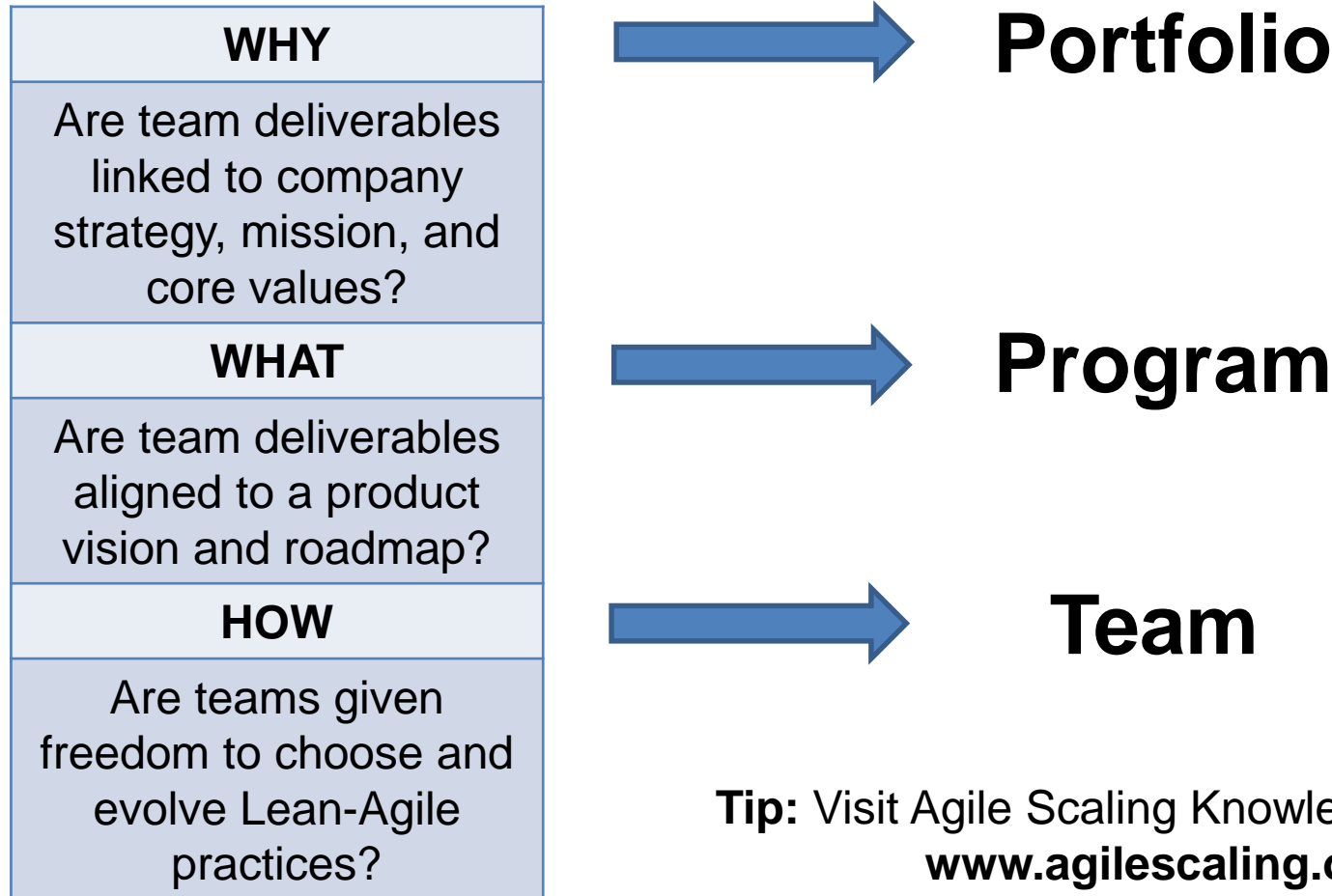
TAKING **SCALE** TO HEART

Source: David J Anderson & Associates, Inc.





# Selection criteria



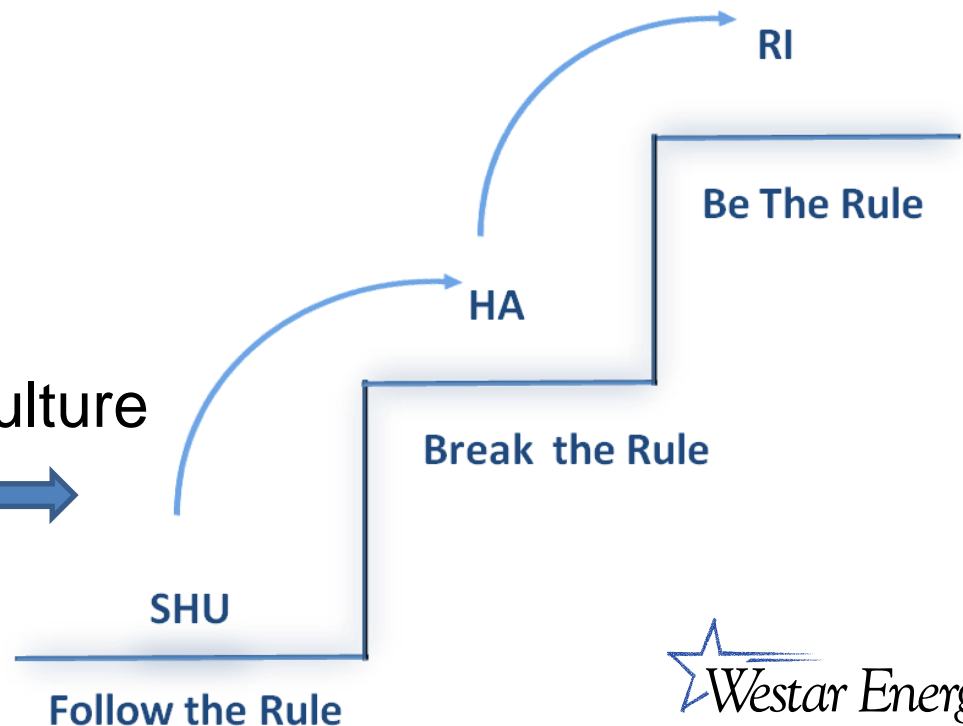
# Other things to consider

## Framework

- Size and Activity of User Community
- Tool Support (Rally, VersionOne, HP ALM, etc)
- Freely Available Education and Training Material
- Certifications
- Case Studies

## Your Company

- Current & Future Culture
- Agile Maturity →
- Line of Business



# Lean-Agile scaling frameworks

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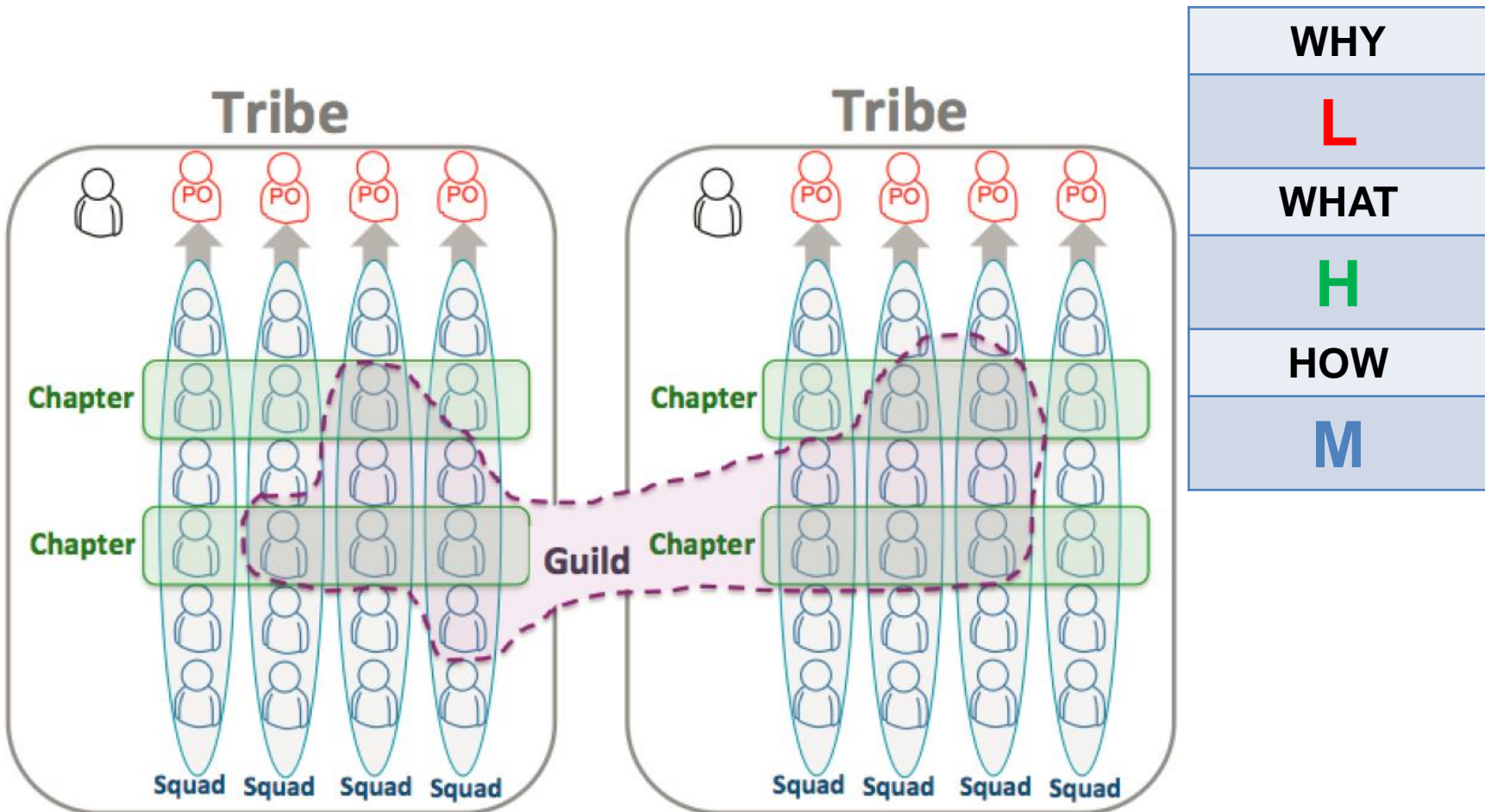
## Mainstream

1. Spotify 'Model' – Henrik Kniberg & Anders Ivarsson
2. Large Scale Scrum (LeSS) – Craig Larman & Bas Vodde
3. Disciplined Agile Delivery (DAD) – Scott Ambler & Mark Lines
4. Scaled Agile Framework (SAFe) – Dean Leffingwell

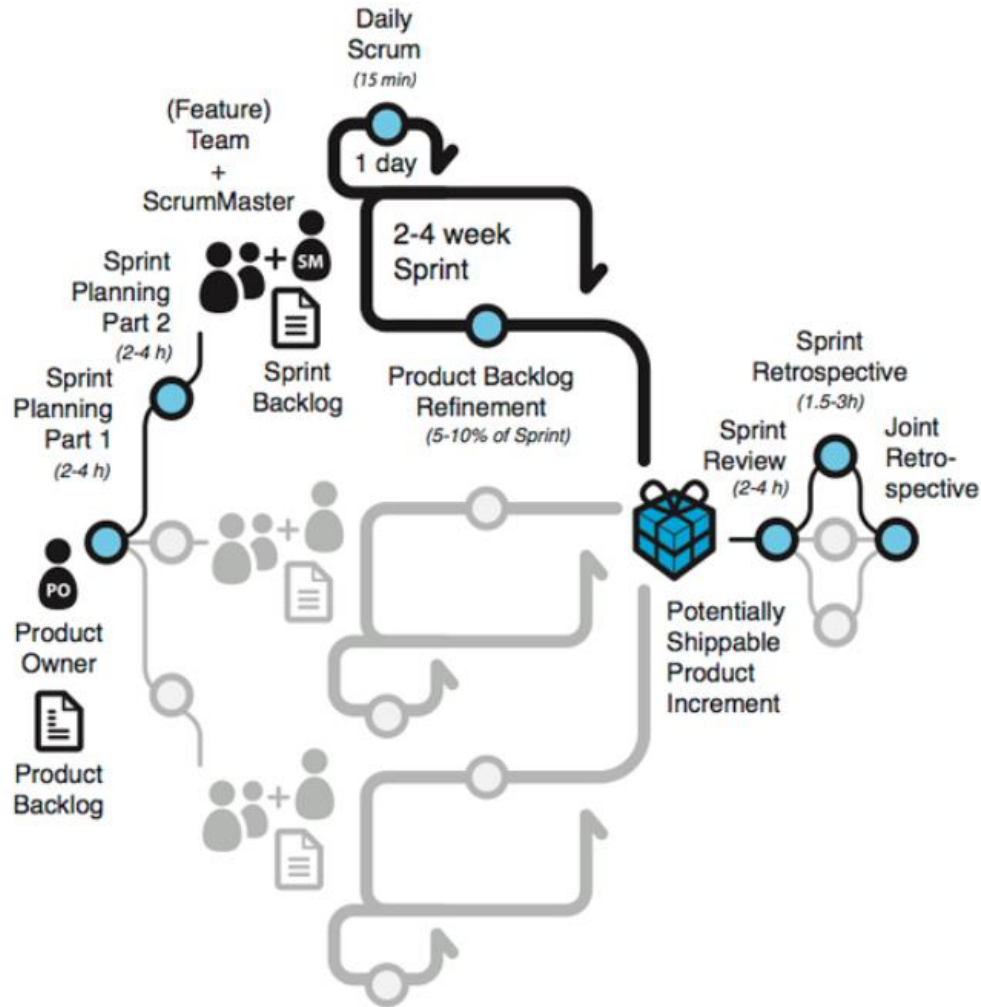
## Lesser known

- Scrum at Scale – Jeff Sutherland
- Nexus – Scrum.org
- Recipes for Agile Governance (RAGE)
- Scrum Lean in Motion (SLIM)
- Sustainable Culture Agile Release in the Enterprise (SCARE)
- FAST Agile

# Spotify 'Model'



# Large Scale Scrum (LeSS)



WHY

L

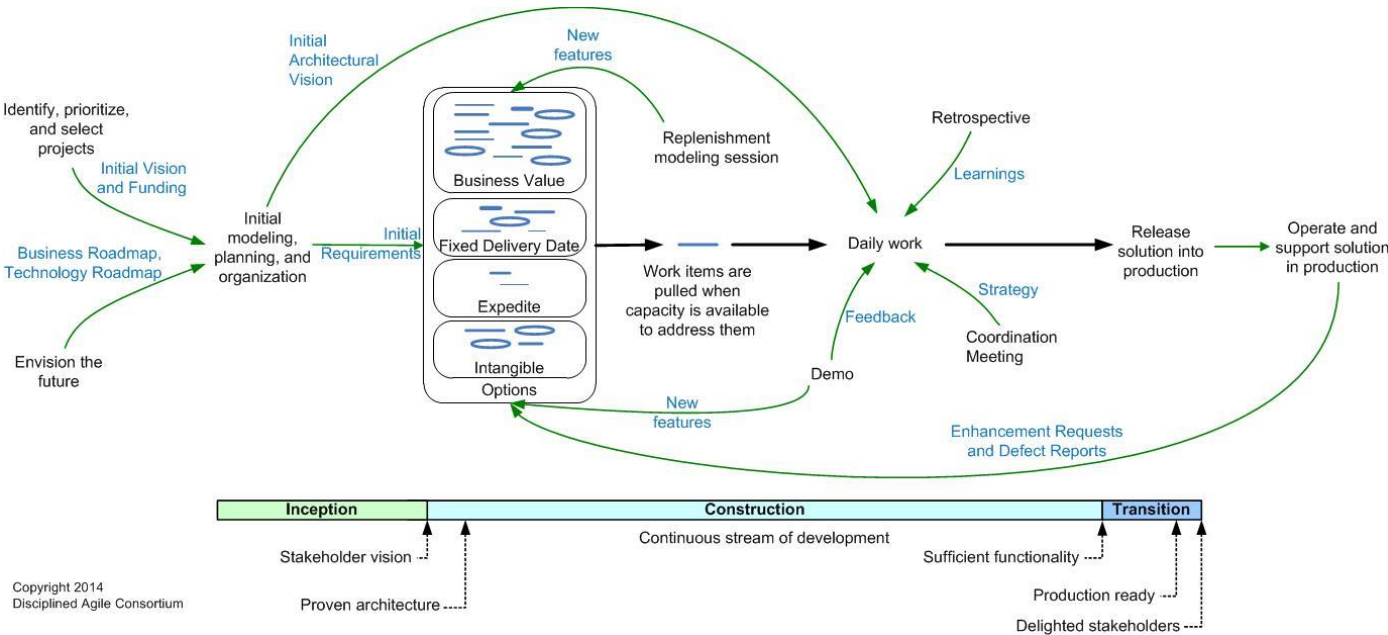
WHAT

M

HOW

M

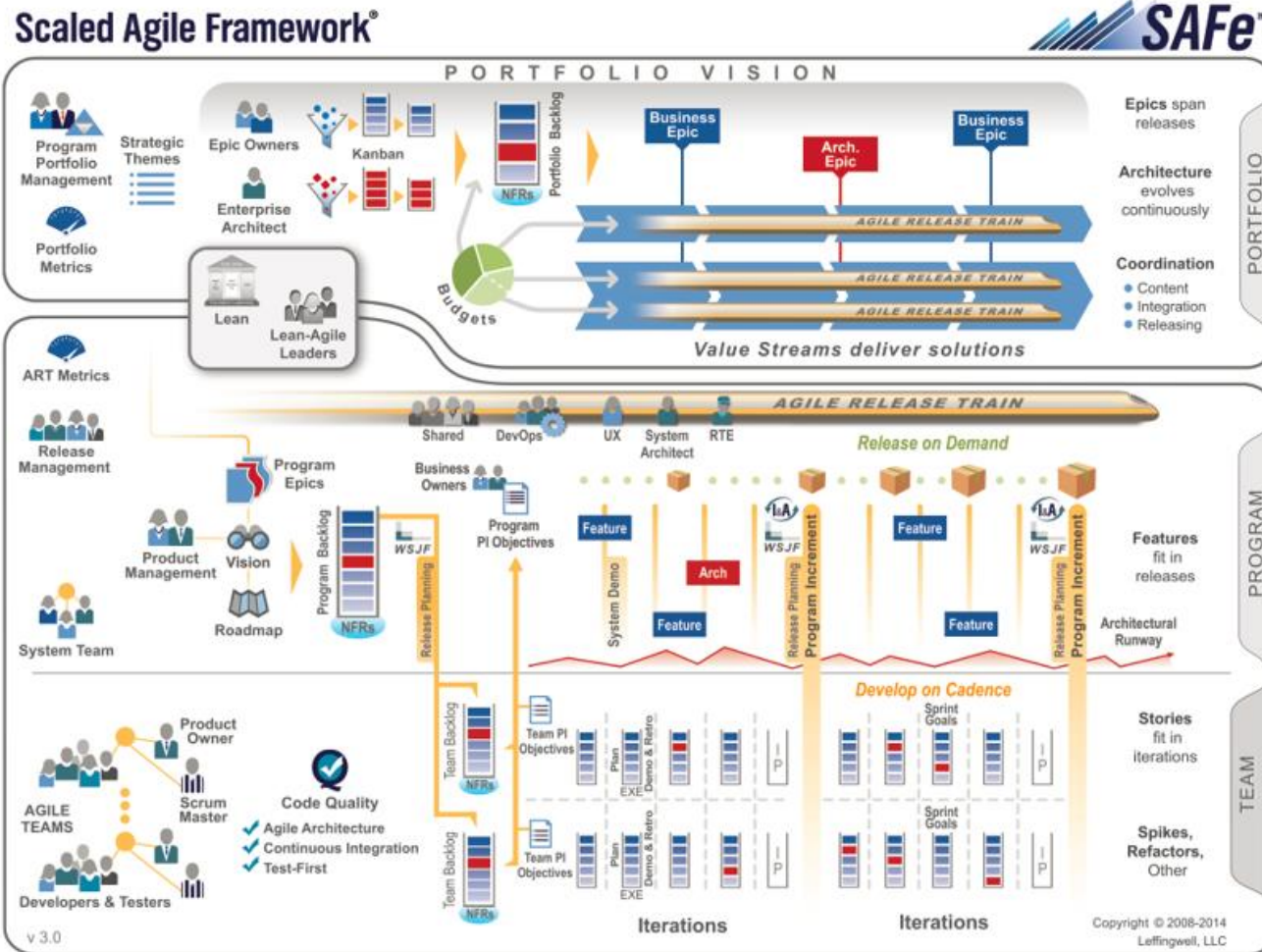
# Disciplined Agile Delivery (DAD)



WHY
M
WHAT
H
HOW
H



# Scaled Agile Framework (SAFe)



WHY

M

WHAT

H

HOW

H

# The Westar journey

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# Strategic themes





# Strategic themes





**We visualized the teams current state...**

# Deliver critical projects

## Today's Reality

- Starting too many things
- No single point of entry
- No gate qualification
- False illusion of progress by getting things started
- Resource shifting = lack of focus
- No understanding of capacity
- Not saying “NO”



## Future State

- Portfolio Kanban
- Value Stream Mapping
- Whole System Thinking
- Actively Manage Queues
- Manage WIP Limits
- Reduce Variability
- Visualization of Work
- Transparency
- Feedback Loops
- Continuous Improvement
- Culture of Collaboration

## Stop Starting and Start Finishing



# Invest in our people

## Today's Reality

- High Individualism
- Hero Mentality
- Little Cross-Training
- Departmental Silos
- Sub-Optimization
- Pulling in Different Directions
- Culture of Control



## Future State

- Agile Teams
- Empowerment
- Cross-Functional
- Individual's & Interactions
- Autonomy, Purpose, Mastery
- Servant Leadership
- Coaching & Training
- Business Collaboration
- Decentralize Control
- Culture of Cultivation

**“Scrum builds great teams of people, not teams of great people – Barry Turner”**

# Core principles

## Lean Portfolio

Visibility, focus, holistic thinking, value flow, continual improvement

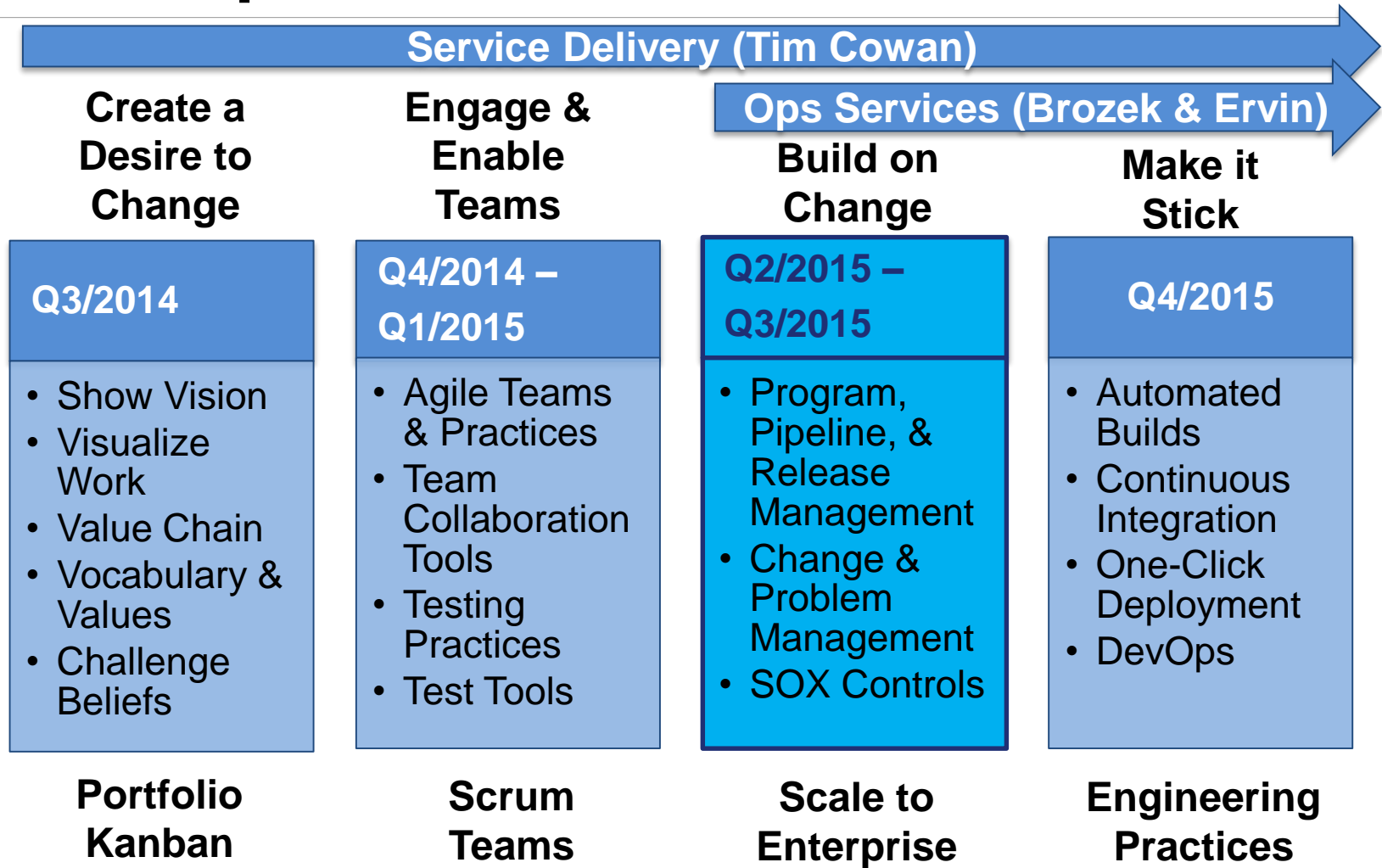
## Agile Teams

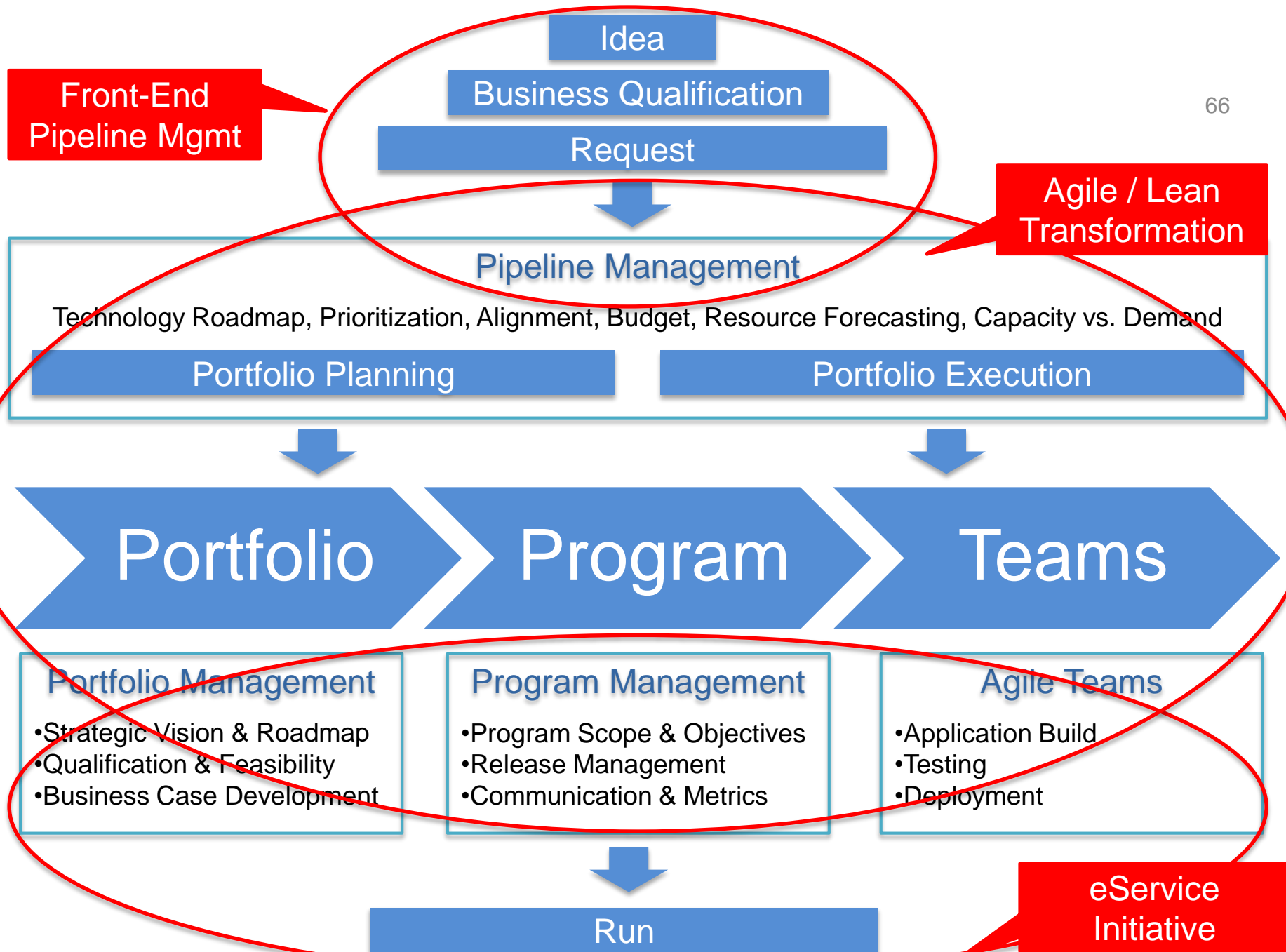
Value-driven, collaborative, transparent, empowered, feedback loops

## Agile Engineering Practices

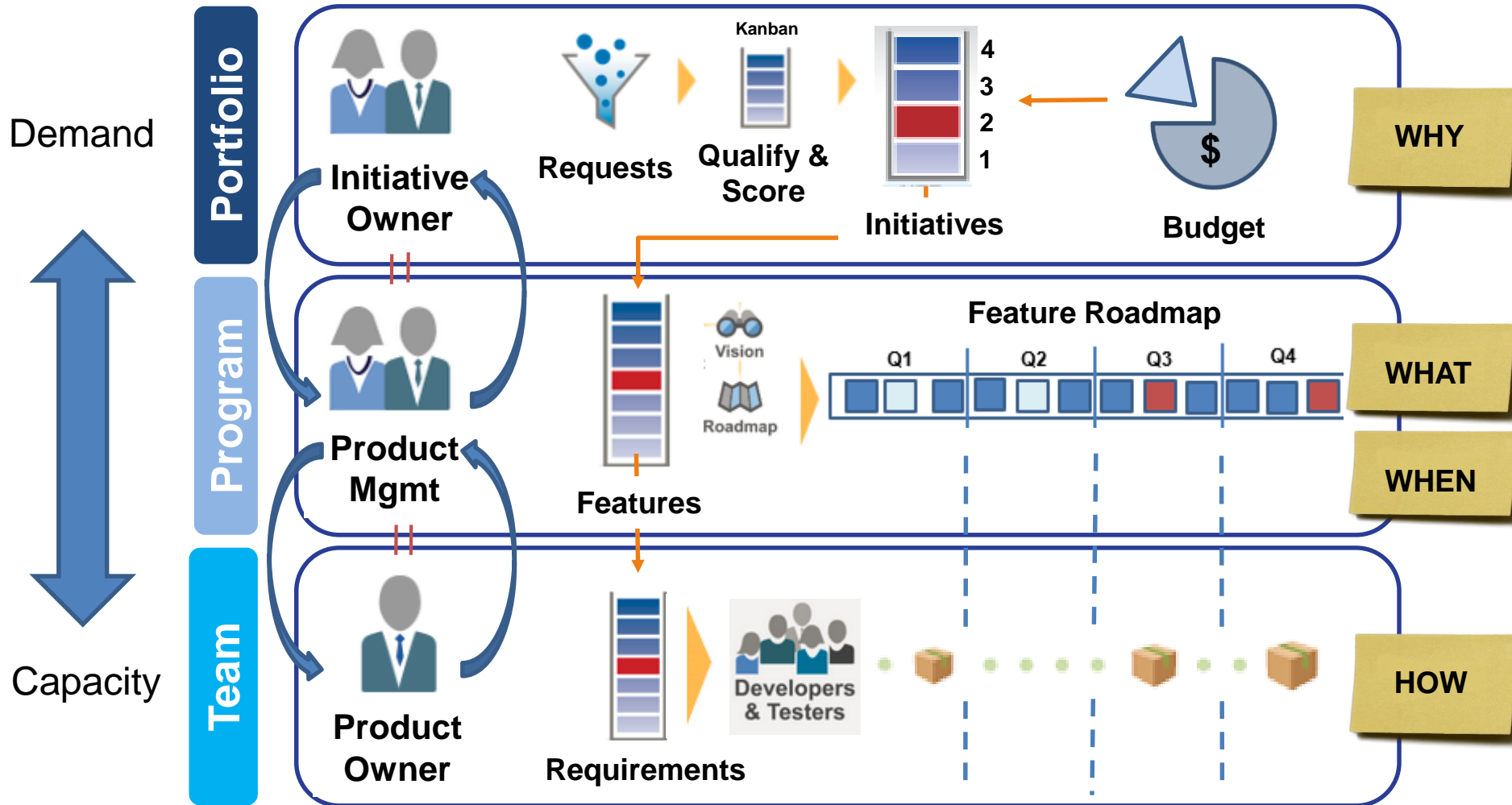
Automation , code and environment management, testing

# Roadmap



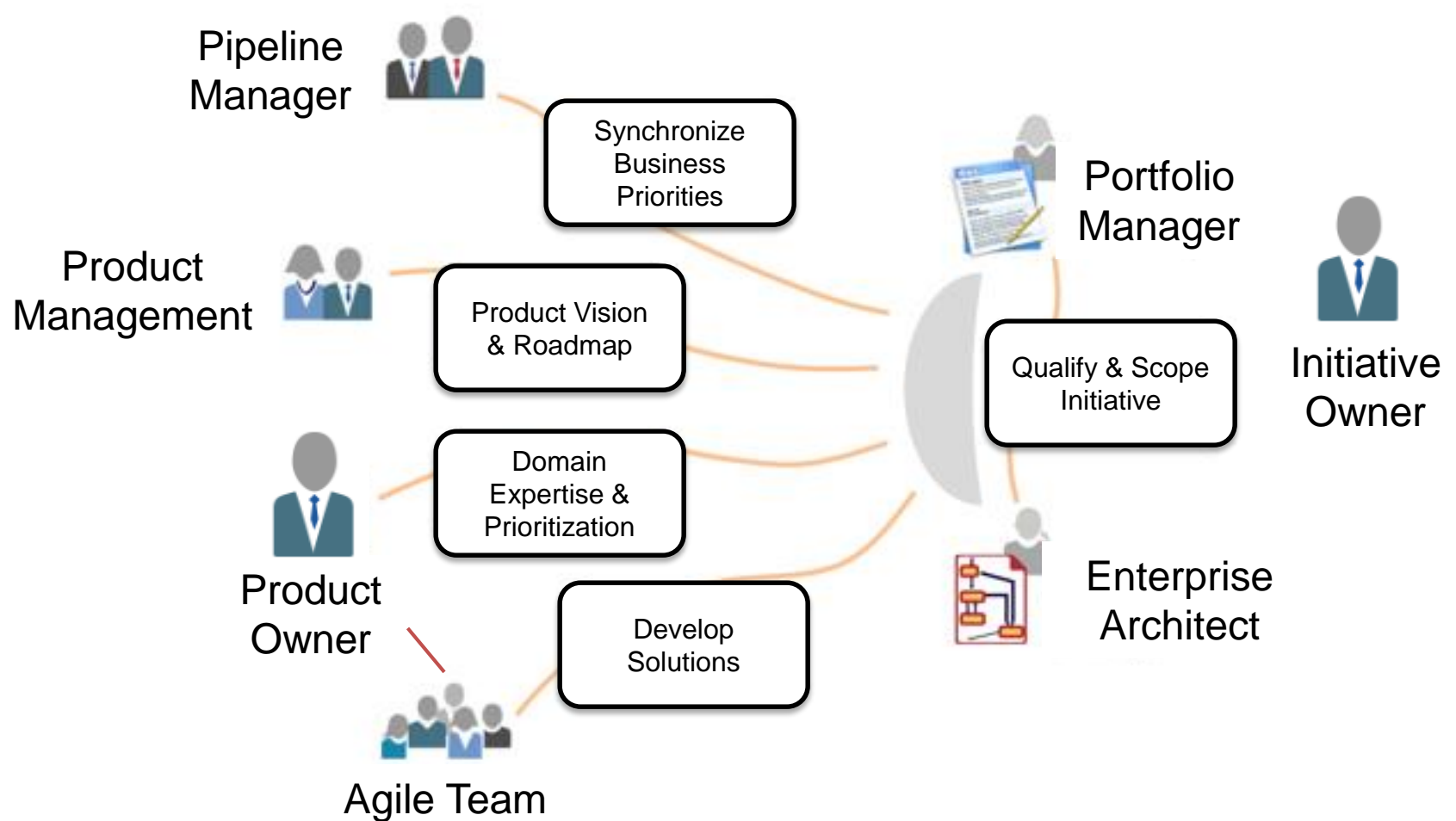


# We chose SAFe as our reference model

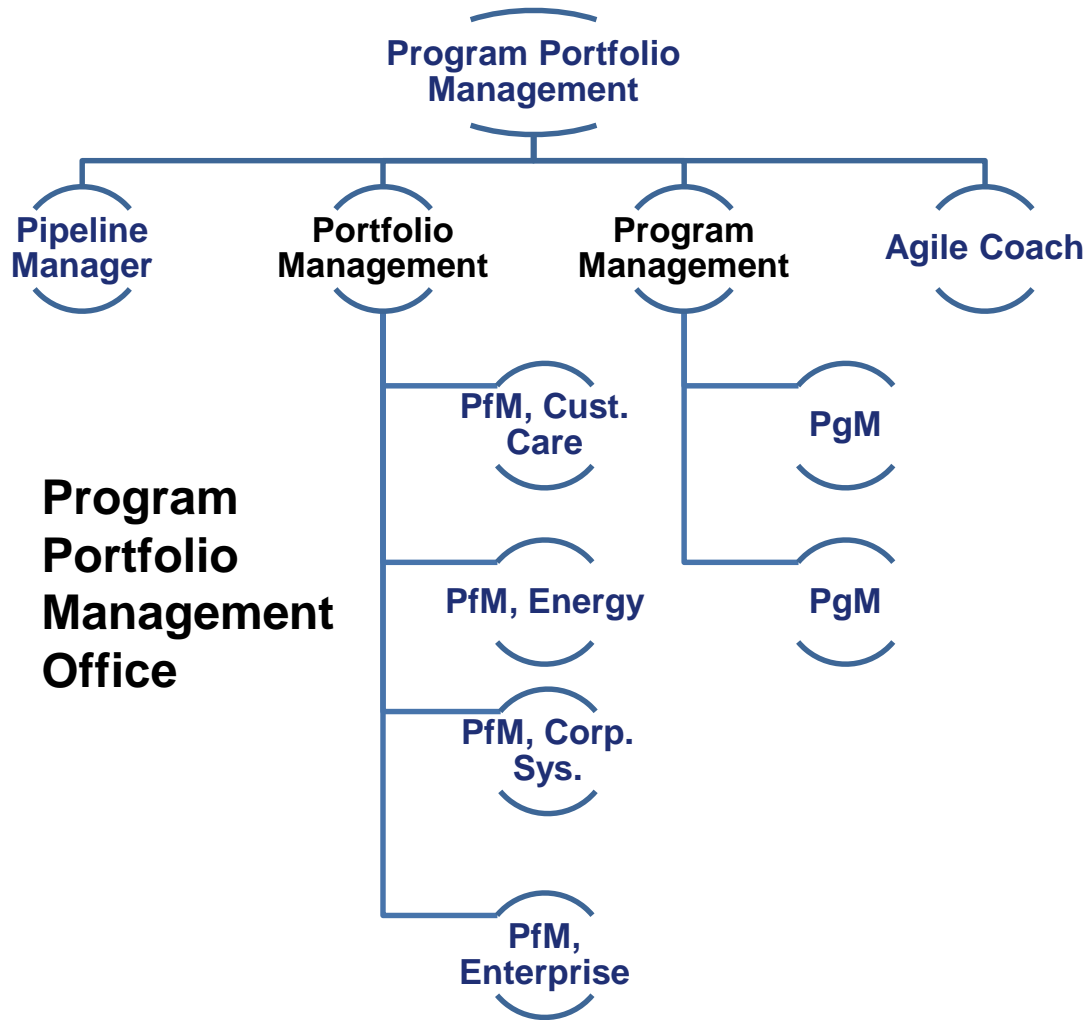




# Future delivery roles



# PPMO organization



## Portfolio Mgr.

- Strategic Alignment
- Qualification & Feasibility
- Business Case & Feature Writing

## Pipeline Mgr.

- Demand & Capacity Modeling
- Resource Analysis & Forecast
- Pipeline Governance

## Program Mgr.

- Schedule Management
- Communication Plan
- Metrics & Status Reporting



**We're eating our own dog food...**

# Transformation Scrum teams

1. Program Portfolio Management
2. Quality Assurance
3. Enterprise Architecture
4. Tools Team



# Initiative Value Statement

**Epic Name:** Westar "Request to Run" Methodology

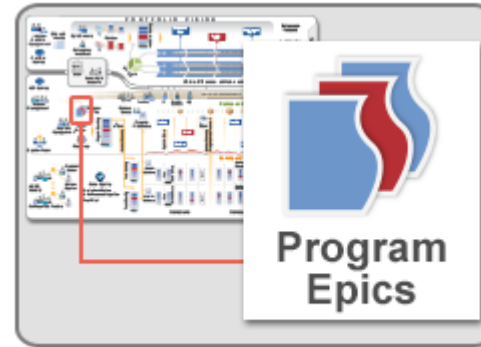
## Epic Value Statement

<b>For</b>	The Westar Enterprise employees, contractors and vendors <sup>1</sup>
<b>who</b>	consume resources, services and capabilities of Technology Services
<b>the</b>	new Request to Run process
	enables us to deliver strategic business value
<b>Unlike</b>	our current silo'd ad-hoc approach which is not aligned to business goals and objectives
<b>our solution</b>	<ul style="list-style-type: none"> <li>- delivers service and products in support of business unit objectives</li> <li>- enables Technology Services to intake work</li> <li>- aligns capacity to ROI</li> <li>- sustains business operations</li> <li>- works with multiple service providers</li> <li>- inspires continual improvement and</li> <li>- improves employee engagement</li> </ul>



# Program Epics

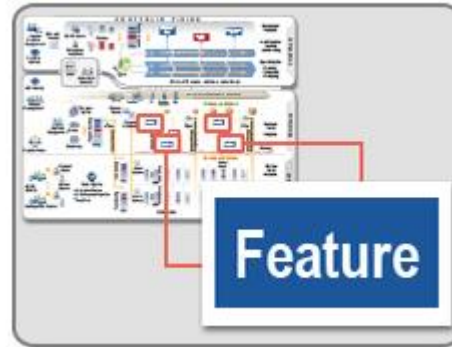
- Engineering Practices
- Enterprise Architecture
- Program Portfolio Mgmt
- Service Management
- Quality Assurance
- TBD...



Epic Value Statement	
For	Westar employees
who	deliver new software
the	ALM
is a	repeatable framework
that	aligns the organization, provides faster business value
Unlike	our legacy waterfall processes or undocumented process
our solution	<does something better - the "why">
Scope	
In Scope:	<ul style="list-style-type: none"> <li>- Development, QA, PPM, Release Management</li> <li>- Prioritization at all levels</li> <li>- Align resourceing to executive decision points</li> <li>-</li> </ul>
Out of Scope:	<ul style="list-style-type: none"> <li>-</li> <li>-</li> <li>-</li> </ul>
Success Criteria:	<ul style="list-style-type: none"> <li>- Methodology is documented at varying levels of detail (e.g. a "Big Picture", process flows, and job aides</li> <li>- Process templates, training and other assets are easily accessed via online tools.</li> <li>- Methodology is rolled out to teams, programs and portfolios</li> <li>-</li> </ul>
Nonfunctional:	<ul style="list-style-type: none"> <li>- Common vernacular</li> <li>- Predictability</li> <li>-</li> </ul>

# Features

- Pipeline Management
- Program Management
- Change Management
- Problem Management
- Release & Config Mgmt
- Testing Center of Practice
- IT Policy & Standards
- TBD...



ID	Feature	Benefit	Acceptance Criteria	User   Business Value	Time Criticality	CoD	Size	WSIF	Status	Notes	Team(s)
1	RACI Document at Team, Program and Portfolio level.	Provides starting point for role contributions to specific activities	Team, Program and Portfolio Level Launch each level, then version control	5	8	13	3	4.33			
2	High-level representation of the methodology					0		0.00			
3						0		0.00			
4						0		0.00			
5						0		0.00			
6						0		0.00			
7						0		0.00			
8						0		0.00			
9						0		0.00			
10						0		0.00			

# Process Transformation Roadmap

PMO = Yellow

QA = Blue

eService = Purple

PI-4 7/15 – 9/22

Create an approach document for Release Configuration

Decision - Analysis and Design Standards.

Publish swim lane diagram for Portfolio Process.

Leadership Reporting

Create an approach document for ITIL Implementation

Program vision and roadmap

Process Rollout Communication – Asset Library.

Stand up BI Scrum Team & Prod Support Kanban Team

Spikes.

Epic Owner Training.

PI-5 9/23 – 12/1

Portfolio Process Approval

VersionOne Hierarchy and alignment

ITIL Effort

Exec Portfolio Report for legacy and Agile

Communication – Update Plan

Complete Release Mgmt Process

Leadership Reporting.

Training

Spikes

Program Level Processes – SIPOCs and Swim lane

Software Configuration Mgmt

Teams

PI-6 12/2 – 2/10

Test Automation Framework

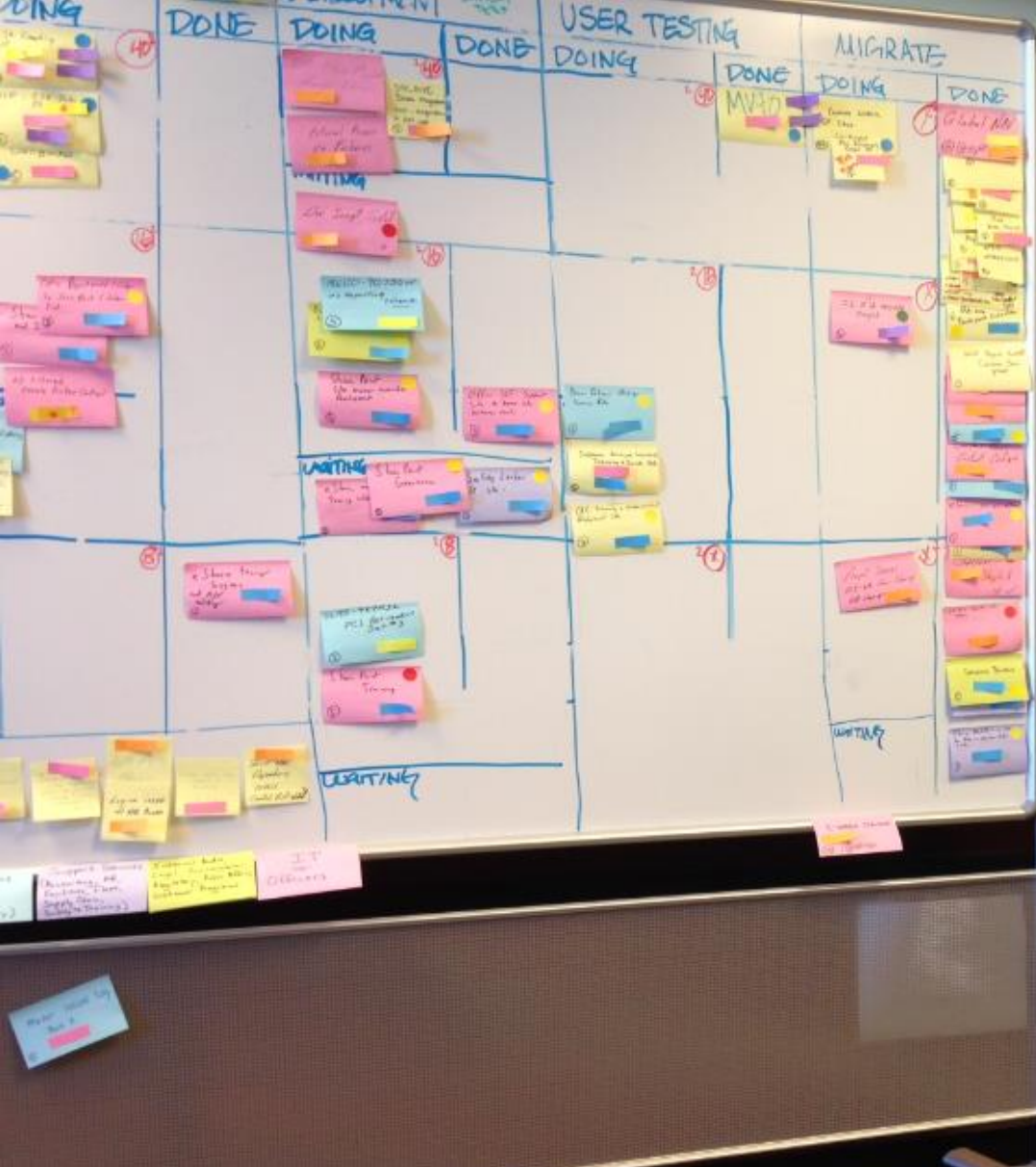
Spikes

PI-7 2/11 – 4/19

# Measures of Success

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<b>Order Takers</b>		<b>Customer Collaboration</b>
<b>Black Box</b>		<b>Transparent Delivery</b>
<b>Individual Hero's</b>		<b>Cross-Functional Teams</b>
<b>Project Overload</b>		<b>Continuous Value Flow</b>
<b>Managing to a Plan</b>		<b>Responding to Change</b>
<b>Improvement Initiatives</b>		<b>Continuous Improvement</b>
<b>Accepts Existing Technology</b>		<b>Drives New Technology</b>



## Understand your current state

- Strategic goals
- Cultural fit
- Agile maturity

## No 'right' starting point

- Most models are built to scale up from Team
- Eat your own dog food

## Scaling frameworks help

- Define your future state
- Tailor the framework
- Answers the WHY, WHAT, and HOW

When choosing a framework...



# Thank you

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