Scaling Product Backlogs to All Levels of the Enterprise: What, Who and How

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Senior Product Manager, Seilevel
## OUR AGENDA

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What Do I Mean By “The Enterprise”

- Global time zones
- Distributed team members
- Diverse users, many system integrations, and complex data
- Corporate-level strategies drive portfolio-down to the team level (2 or 3 levels of planning)
What It Means to “Be Agile”

- Individuals & Interactions
- Working Software
- Customer Collaboration
- Responding to Change

Processes & Tools
- Comprehensive Documentation
- Contract Negotiation
- Following a Plan

“while there is value in the items on the right, we value the items on the left more”

1Manifesto for Agile Software Development - http://agilemanifesto.org/
Large Enterprise Challenges on the Agile Manifesto

- **Individuals & Interactions**
  - Distributed so interactions are hard
  - MORE tools to facilitate interactions and structure to coordinate

- **Working Software**
  - Can’t remember all the details to make it work
  - MORE documentation to capture and allow large teams to see

- **Customer Collaboration**
  - Many people to gain agreement with
  - MORE facilitation to gain agreement about what to build

- **Responding to Change**
  - Too many interfaces to not formally coordinate
  - MORE planning to coordinate interlocks
Each group must put their deck of cards in order.
Lessons Learned:
• Your facilitation and collaboration skills are still needed in agile
• We also need a plan for how to work with other teams!
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What scaled approaches are there?

How do they scale the backlog?
Scaled Agile Approaches

- SAFe – Scaled Agile Framework
- LeSS – Large Scale Scrum
- DaD – Disciplined Agile Delivery
- Nexus
- Spotify Model
- SSwS – Scaling Scrum with Scrum
- DSDM – Drive Strategy Deliver Mode
- RAGE – Recipes for Agile Governance
- Scrum at Scale
- Enterprise Scrum
- SLIM – Scrum Lean in Motion
- FAST Agile
- SCARE – Sustainable, Cultural Agile Release in the Enterprise
LeSS – Large Scale Scrum

- **Portfolio Layer**
- **Large Solution Layer**
- **Product Layer**
- **Agile Team Layer**

**Product Backlog**

- **Head PO**
- **Feature Team**

**Product Backlog**

- **Head PO**
- **Feature Team**
SAFe – Scaled Agile Framework

Portfolio Layer

Large Solution Layer

Program Layer

Agile Team Layer

Strategic Themes and Direction

Multi-Product Roadmap

Program or Release Train

Program (or RT)

Feature Team

Feature Team

Feature Team

Feature Team

Feature Team

Feature Team
DaD – Disciplined Agile Delivery

Product + Portfolio Management based on Organization goals

Portfolio Layer

Organization Level

Disciplined DevOps

IT Delivery Layer

Agile Team + Architecture Owner

Agile Team + Architecture Owner

Agile Team + Architecture Owner

Independent Testers and Integrators

Specialists

Technical Experts
With So Many Options, How Do We Choose?

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<th>Approach</th>
<th>IT Teams</th>
<th>Dependency Complexity</th>
<th>Assumed Level of Eng. Practices</th>
<th>PO/ Backlog Scaling</th>
<th>Overhead</th>
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<tr>
<td>SAFe</td>
<td>15+</td>
<td>High</td>
<td>Advanced</td>
<td>At each level</td>
<td>High</td>
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<tr>
<td>LeSS</td>
<td>2-8</td>
<td>Low</td>
<td>Beginner</td>
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Considerations

Level in the Enterprise

Number of Teams Managed

Dependency Types

TIPS

Scrum of scrums

PI Planning

Know just enough

Double team as needed

Co-locate/Roam
Collaboration is Key

- Selecting Approach
- Defining Processes
- Organizing the Team
- Communicating
- Prioritizing
- Analyzing
- Eliciting
# Agenda

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How do you coordinate between the levels?

- Prioritize based on value
- Easy to see the big picture
- Find missing details
- Collaborate with customers to identify needs
- Enhance team communication

Models in agile
What visual models have you used?
At what levels?
Meet Blue, the SeiEntertainment Large Solution Manager
SeiEntertainment SAFe® Structure

Increase revenue by 20%

Subscription Billing

Theatrical Releases

Subscription Music

Subscription Video

Music Team
SeiSounds Engine
Movie Team
SeiMoves Engine
Billing Team
Business problems & objectives drive the backlog at any level

**Business Problem**
SeiEntertainment’s revenue has dropped by 20% in the last quarter

**Business Objective**
Increase quarterly revenue from $1M to $1.2M within two quarters (from development start)
Business Objectives Model by Levels

- **Strategic Driver**
  - Business Problem 1
  - Business Objective 1

- **Portfolio Epic 1**
  - Business Problem 1.1
  - Business Objective 1.1
  - Business Problem 1.2
  - Business Objective 1.2
  - Business Problem 1.3
  - Business Objective 1.3

- **Program Epic 1.1**
  - Program Epic 1.2
  - Program Epic 1.3

- **Success Metric**
  - 1.1.1
  - 1.1.2
  - 1.1.3
  - 1.2.1
  - 1.2.2
  - 1.2.3
  - 1.3.1
  - 1.3.2
  - 1.3.3

- **Feature**
  - 1.1.1
  - 1.1.2
  - 1.1.3
  - 1.2.1
  - 1.2.2
  - 1.2.3
  - 1.3.1
  - 1.3.2
  - 1.3.3

- **Portfolio**
- **Program**
- **Team**
Feature Trees can help you organize value and organize by programs/teams

- A one-page view of all the features
- Organized into levels of features
- Used to organize requirements by feature
- Use naming conventions
Ecosystem Maps Help Identify Dependencies

- Consider every logical system in the organization
- Shows all system interfaces
SeiEntertainment Example Ecosystem Map

Billing Team

Profile mgmt system → Billing system

Billing Team

Subscription data

SeiMoves Team

Movie Rec Engine

Movie Team

Movie data

Movie catalog

SeiSounds Team

Radio Rec Engine

User Interface

UI Team

Genre requests

Movie list

Genre requests

Song recs

SeiMoves Team

Movie Rec Engine

Movie Team

Movie data

Movie catalog

SeiSounds Team

Radio Rec Engine

User Interface

UI Team

Genre requests

Movie list

Music Team

Song catalog
Takeaways, Next Steps and What Can I Do Now?

Pick an Approach

- All approaches have some way of scaling product ownership

Put the right resources at each level

- At each level, the PO for that level needs enough info to effectively manage the backlog and make tradeoff and prioritization decisions

Use visual models at each level to manage the backlog

- Business Objectives Models, Feature Trees and Ecosystem Maps help at the program and portfolio levels to identify value and dependencies
Read More

- **Software Requirements, 3rd Edition** (Wiegers and Beatty 2013)
- **Visual Models for Software Requirements** (Beatty and Chen 2012)
- **Succeeding With Agile** (Cohn 2009)
- **Scaling Software Agility: Best Practices for Large Enterprises** (Leffingwell 2007)
- Gartner article: Market Guide for Enterprise Agile Frameworks

• Scaled Agile Framework for Enterprise (SAFe) ([http://scaledagileframework.com/](http://scaledagileframework.com/))
• Large Scale Scrum (LeSS) ([https://less.works/](https://less.works/))
• Disciplined Agile Delivery ([http://www.disciplinedagiledelivery.com/](http://www.disciplinedagiledelivery.com/))
Questions?

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