Supersizing SAFe®

Enabling Boeing's Digital Transformation
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Associate Technical Fellow, iSPCT
Learning Objectives

- Boeing’s approach to Digital Transformation
- Understand the concept and need for a Super Solution Train
- Practices to improve alignment across a large, complex network of Value Streams
- How business and technical architectures can evolve incrementally to support a Digital Transformation
Boeing’s Digital Transformation
What is 2nd Century Enterprise Systems?

2CES is a company-wide initiative transforming Boeing through process improvements, data management and technology enhancements.

2CES will result in a One Boeing approach to doing business through standardized tools and processes.

2CES will enable Boeing to:
- Reduce time to value by streamlining and simplifying work
- Deliver global-ready and adaptive processes and systems
- Evolve to meet future and expanding business needs
- Unleash data and information to transform decision-making
2CES Strategies

- **Common architecture** that easily adapts to changing business priorities
- **Digital thread** that increases visibility of work throughout our value streams
- **Process improvements** that standardize the way we work
- **Agile work processes** that drive efficiency, productivity and faster insights
- ‘**Out-of-the-box**’ capabilities without the need for customization
- **A culture** that empowers cross-functional collaboration through process, data and technical integration across Boeing
Business Agility Enablers

- Boeing Vision & Behaviors
- Lean-Agile Values & Principles
- Integrated Agile Ways of Working
- Continuous Integration & Delivery
- Continuous Learning
Super-Sizing SAFe®
Scaling Up to Scale Down
2CES SAFe Transformation Approach

- Start where you are
- Align to the emerging culture
- Shift the mindset
Super Solution Train

Benefits:
- Integration and Alignment

Questions:
- How many ARTs in a Solution Train?
- How do I operate a Super Solution Train?
Solution Practices
Super Solution Operational View

Execute the Current PI

Iteration 1
- Solution Sync
- SST Workshops
- PI X-1 Final Solution Demo

Iteration 2
- Solution Sync
- SST Workshops
- Solution Demo

Iteration 3
- Solution Sync
- SST Workshops
- Solution Demo

Iteration 4
- Solution Sync
- SST Workshops
- Solution Demo

Iteration 5
- Solution Sync
- SST Workshops
- Solution Demo

Iteration 6 (IP)
- Pre/Post PI Planning
- Summarize Solution Objectives
- Capture PI Metrics

Just-In-Time refinement and preparation for next PI

Continuous Exploration
Practice: Solution Planning Workshop

Input:
- NFRs
- Solution & Program Backlogs
- Capabilities & Features

Business Context
Product/Solution Vision
Architecture Vision and Development Practices
Planning Context and Lunch
Team Breakouts
Draft Plan Review
Management Review and Problem Solving

Output:
Planning Adjustments
Team Breakouts
Final Plan Review and Lunch
Program Risks
PI Confidence Vote
Plan Rework if Necessary
Planning Retrospective and Moving Forward

SST, LST, ART Roadmaps
Dependencies
Risks
Practice: Solution Team Breakouts

Growing the Social Network

Workshop #1
Day 1 Breakout
AGILE RELEASE TRAIN

Day 2 Breakout
AGILE RELEASE TRAIN

Workshop #2
Day 1 Breakout
AGILE RELEASE TRAIN

Day 2 Breakout
SPEED DATING

Workshop #3
Day 1 Breakout
AGILE RELEASE TRAIN

Day 2 Breakout
SPEED DATING

Workshop #4

Track 1  |  Track 2  |  Track 3  |  Track 4
---|---|---|---
Capabilities | Capabilities | Capabilities | |
## Practice: LST IP Sprint Schedule

### Experiment 1

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>PI-Planning Readiness</td>
<td>I&amp;A</td>
<td>LST Pre-PI Planning</td>
<td>PI-Planning Day 1</td>
<td>LST Post-PI Planning</td>
</tr>
<tr>
<td>Innovation Demos</td>
<td>Backlogs Updated</td>
<td>Final System and solution integration &amp; testing (as necessary)</td>
<td>PI-Planning Day 2</td>
<td></td>
</tr>
<tr>
<td>Buffer for left-over work</td>
<td></td>
<td>Innovation; Hackathon; PI-next research</td>
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**Notes:**
- **Monday:** Innovation Demos
- **Tuesday:** Backlogs Updated
- **Wednesday:** LST Pre-PI Planning
- **Thursday:** PI-Planning Day 1
- **Friday:** LST Post-PI Planning
## Practice: LST IP Sprint Schedule

### Experiment 2

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<td></td>
<td>PI-Planning Day 1</td>
<td>PI-Planning Day 2</td>
<td>Optional Time for Planning</td>
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**Wednesday**
- Innovation; Hackathon; PI-next research
- Buffer for left-over work
- Final System and solution integration & testing (as necessary)

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**LST**

**ART**
**Practice: SST/LST IP Sprint Schedule**

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**Proposed**

- **Monday**
  - LST Pre-PI Planning
  - PI-Planning Readiness
  - Innovation Demos

- **Tuesday**
  - I&A

- **Wednesday**
  - PI-Planning Day 1

- **Thursday**
  - SST Pre-PI Planning

- **Friday**
  - ART to ART Sharing, Dependency Resolution
  - PI-Planning Day 2

- **SST**
- **LST**
- **ART**
Evolving the Enterprise Architecture
Model-Based Everything

- Architectural Methods
- Architectural Implementation & Adoption
Lessons for those who follow

- Follow SAFe and Agile values and principles
- Experiment and learn
- Challenge the status quo
Questions
Thank you!

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