NAPA Agile Story: From Zero to Hero in Two Years

Toivo Vaje
@ToivoVaje
agilehope.blogspot.com

#NAPA
#SAFe
Main achievements

- Transparency increased on all levels
- Delivery cycle time down from >12 months to 3 months
- Increased predictability (2014 92% successful releases)
- Need for patches decreased
- Less defects in main branch
- Good basis for further growth
Context: NAPA IN NUMBERS

- 200 employees
- 11 country offices worldwide
- 95% of ships built annually are designed by our customers using NAPA
- Software development sites
- >25 years
- 3 development sites
The Beginning

• Found by 7 people working at Wärtsilä shipyard in 1989
• Unique and superior solution for the initial design part of ships including calculations.
• Global from the start
• Became the de facto standard
Growth Pain

Annual big major releases
Projects (a lot of)
Variable scope and schedule
Structures missing
Organizational Change

- Basic Scrum training for all developers
- Every Product Owner and Scrum Master certified
- Communities of Practice for Scrum Masters and Testers
- Scrum not enough. Shortly started implementing SAFe®
- Infrastructure handled by System Team
- Leading SAFe (SA) trainings by Nitor Delta
Applying Scaled Agile Framework® @NAPA

**Team metrics:** velocity, bugs, forecast hit-rate
**Program metrics:** Number of successful releases, release test execution-%, bugs found in master & released products

**Product Management:** Owners of Roadmap, bridge between customers and company. Headed by Chief Portfolio Officer.

**Release Team:** Continuous integration, installers, JIRA & other tools, releases & patches, version control

**Whole company Release planning**

**Product Teams:** Product Owner and Developers (one is Scrum Master)

**Portfolio Funnel. New ideas that are approved end up as Roadmap Themes.**

**Quarterly Releases**

**Sprints. Mostly two weeks. Not synchronized.**
Team Structure

• All teams starting with pure Scrum
• Every team had own Product Owner, Scrum Master and Backlog
• Many distributed teams
How we make Releases Now

Fixed:
- Release Cycle
- Quality
- (Resources)

Scope is the only variable

http://www.scaledagileframework.com/develop-on-cadence-release-on-demand/
Different Levels of Abstraction

- Value Delivery
  - Portfolio and Product Management
  - Vision & Roadmap
  - Epics / Features
  - Stories
  - Tasks

- 3 months Release Train
  - 2-4 week Sprints
  - Heartbeat, Daily work

- Is part of a larger entity
- Splits down into Sprints
Reliability First

- Testing more efficient
- Transparently measuring test execution
- Less patches needed

![Defects found in Master Branch (until the branching point)]
Tools are important
Split work between Product Owner and Product Manager 5/2013

• Both customers and teams benefit
Product Manager

- Product Roadmap & Vision
- Long term plans (big rocks)
- Close contact with customers

Release Train Engineer

- Facilitates Release events
- Gathers results
- Makes things visible

http://www.scaledagileframework.com/rte/
Contents

- History 2012
- Organizational change 2012
- Release Planning Days 2014-

Increasing Transparency
Release Planning

Whole company together
Event called Release Planning Day
http://www.scaledagileframework.com/release-planning/

http://agilehope.blogspot.com/2014/05/release-planning-day.html
Release Planning Day

- Whole company together
# Release Planning Day Rough Schedule

## Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-9:15</td>
<td>Business Context</td>
</tr>
<tr>
<td>9:30-10:30</td>
<td>Product Roadmaps</td>
</tr>
<tr>
<td>10:30-10:45</td>
<td>Planning Process and Requirements</td>
</tr>
<tr>
<td>10:45-12</td>
<td>Team Breakout #1</td>
</tr>
<tr>
<td>12-13</td>
<td>Lunch</td>
</tr>
<tr>
<td>13-14</td>
<td>Draft Plan Review</td>
</tr>
<tr>
<td>14-</td>
<td>( Team Breakout #2 + Problem Solving &amp; Adjustments )</td>
</tr>
</tbody>
</table>

## Day 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30-</td>
<td>Team Breakout #2 + Problem Solving &amp; Adjustments</td>
</tr>
<tr>
<td>10:30-</td>
<td>Final Plan Review</td>
</tr>
<tr>
<td></td>
<td>Vote of Confidence &amp; Plan rework if needed</td>
</tr>
</tbody>
</table>
Conclusions & What works

• Co-located teams
• Dedicated POs
• Increasing Transparency
• Working together
Enjoy Working Together!

• Every six months we arrange NAPA Hackathon (24 hour coding/idea event)
• Anyone can introduce an idea and get whole company’s attention for 5 minutes
• Blog post about how we did it in practice: http://agilehope.blogspot.com/2014/06/how-we-arranged-hackathon.html

http://www.scaledagileframework.com/innovation-planning/
Enjoy Working Together!
SAFely forward!

http://www.napa.fi