The Key to the SAFe: Principles over Practices

Agile 2014

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I'll never be able to finish my project on time.

You need to take ownership.

Can I hire more programmers?

No.

Can I reduce the number of features?

No.

So... I'm just taking ownership of the failure?

Don't be greedy.

WE'RE GOING TO TRY SOMETHING CALLED AGILE PROGRAMMING.

THAT MEANS NO MORE PLANNING AND NO MORE DOCUMENTATION. JUST START WRITING CODE AND COMPLAINING.

I'M GLAD IT HAS A NAME. THAT WAS YOUR TRAINING.
Release Train | BOOK CLUB

BACKLOG

Chapter 16: Release Planning
(Julian Senathi-Raja & Lee Anderson)

Chapter 22: Moving to Agile Portfolio Management
(Julian Senathi-Raja)

Chapter 23: Investment Themes, Epics & Portfolio Planning
(Julian Senathi-Raja)

NEXT (2)

Chapter 15: The Agile Release Train
(Em Campbell-Pretty)

Chapter 10: Acceptance Testing
(Amol Narayan)

Chapter 14: Role of the Product Manager (APMS Team)

Chapter 11: Role of the Product Owner (APMS Team)

DONE

Chapter 9: Iterating, Backlog, Throughput & Kanban
(Lee Anderson)

Chapter 12: Requirements Discovery Toolkit (APMS Team)

Chapter 13: Vision, Features & Roadmap (APMS Team)

Chapter 17: Non functional Tests

Your enterprise can and should use only what it needs from this model; otherwise it isn’t the simplest thing that can possibly work.

- Dean Leffingwell
But how?
Goal: Value

Foundation: Leadership

- Respect for People
- Product Development Flow
- Kaizen

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When someone learns to drive a car, it is not enough to tell him or her, “The general principle is to arrive at a certain place without hurting or killing anyone. Good luck!”

- Jurgen Appelo
Adapt what is useful, reject what is useless, and add what is specifically your own.

- Bruce Lee
The goal of Lean is unarguable – to sustainably deliver the maximum amount of value to the customer in the shortest possible lead time…

– Dean Leffingwell
SAFe Practice: Value Stream Mapping

Weekly review of requests means an average wait of ½ week
Wait an average of 2 weeks for an architect
Wait an average of 2 weeks for developers
Biweekly releases means a wait of an average of 1 week for verification

Value
- Request: 5 min
- E-mail Supervisor
- Approve: 2 min
- E-mail Tech Lead
- Technical Assessment: 15 min
- Assign Developer
- Code & Test: 2 hours
- To Verification
- Verify: 15 min
- To Operations
- Deploy: 3 min

Efficiency: 1%

Waste
- 15 min
- ¼ week
- 2 weeks
- 2 weeks
- 1 week
- 3 hr 45 min
- ¼ week
- 6 weeks + 4 hrs

Touch time: 2 hrs. 40 min
Delivery time: 6 weeks

Extra 15 minutes to fill out request form
Only 15 minutes of 4 hours should be needed to verify

Figure 4. Example of Value Stream Mapping. Source, Poppendieck (Ref 1)
ADDITIONAL PRACTICE: IMPACT & STORY MAPPING

To manage one must lead. To lead, one must understand the work that he and his people are responsible for

- W. Edwards Deming
SAFe PRACTICES: LEAN | AGILE LEADERS

1) Take a Systems View
2) Embrace the Agile Manifesto
3) Implement Product Development Flow
4) Unlock the Intrinsic Motivation of Knowledge Workers
ADDITIONAL PRACTICE: EVERYONE HAS A TEAM

http://www.prettyagile.com/2014/03/launching-agile-release-train-while.html
ADDITIONAL PRACTICE: EVERY TEAM IS AN AGILE TEAM

Continuous Improvement

Operations

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Hey Pig, I was thinkin' we should open a restaurant.

I don't know. What would we call it?

Ham -n- Eggs

How about "Ham -n- Eggs."

No thanks, I'd be committed, but you'd only be involved!
“…we must constantly be aware that it is our people who actually do all the value added work…”

- Dean Leffingwell
SAFe PRACTICE: TEAMS. CUSTOMERS & PARTNERS

Teams

Customers

Partners
**Additional Practice: The Net Promoter System**

How likely is it you would recommend us to a friend?

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<th>Extremely Likely</th>
<th>How likely is it you would recommend us to a friend?</th>
<th>Not at all Likely</th>
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</table>


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PRINCIPLE: KAIZEN

“We can do better.”

- Dean Leffingwell
SAFe Practice: Sprint & PI Retrospectives
ADDITIONAL PRACTICES

Leadership System Improvement

Chapters

Bubble Up
ADDITIONAL PRACTICE: BUBBLE UP

http://www.prettyagile.com/2013/06/bubble-up.html
ADDITIONAL PRACTICE: SPECIALIST CHAPTERS
ADDITIONAL PRACTICE: LEADERSHIP IMPROVEMENT KANBAN

release train
continuous improvement

http://www.prettyagile.com/2014/04/being-agile-team-of-agile-leaders.html
**PRINCIPLE: PRODUCT DEVELOPMENT FLOW**

1. Take an economic view
2. Actively manage queues
3. Understand and exploit variability
4. Reduce batch sizes
5. Apply WIP constraints
6. Control flow under uncertainty: cadence and synchronization
7. Get feedback as fast as possible
8. Decentralize control

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The Principles of Product Development

FLOW

Second Generation Lean Product Development

DONALD G. REINERTSEN
PRINCIPLE: TAKE AN ECONOMIC VIEW

If you only quantify one thing, quantify the cost of delay.

– Don Reinertsen
SAFe PRACTICE: WEIGHTED SHORTEST JOB FIRST

BUSINESS VALUE

+ TIME CRITICALITY

+ RISK REDUCTION/
OPPORTUNITY ENABLEMENT

__________________________

JOB SIZE
ADDITIONAL PRACTICE: PLANNING POKER WITH EXECS

Planning Poker® Instructions:

1. Each team member takes a card.
2. The team discusses each item in turn.
3. Each team member places their card on the table, facing the team, showing the number they believe is the most appropriate number of story points for the item.
4. The team can discuss the numbers until a consensus is reached.
5. The item is then considered done when the team feels comfortable with the number assigned.

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Queues delay feedback, and delayed feedback leads to high costs.

– Don Reinertsen
SAFe PRACTICE: SINGLE QUEUE MULTI-SERVER
SAFE PRACTICE: PROGRAM INCREMENTS

Figure 2. The PI pattern

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ALTERNATIVE PRACTICE: ROLLING WAVE PLANNING

http://www.prettyagile.com/2014/02/from-psi-planning-to-unity-day-and-back.html
**Additional Practice: Visualize Everything**
PRINCIPLE: UNDERSTAND & EXPLOIT VARIABILITY

100% utilization drives unpredictability.

– Don Reinertsen
SAFe Practice: Innovation & Planning (IP) Sprint

Figure 2. Example calendar for an IP sprint

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ALTERNATIVE PRACTICE: 10% TIME
ALTERNATIVE PRACTICE: GET TO FEATURE TEAMS FAST
The most important batch is the transport batch.

- Don Reinertsen
SAFe PRACTICE: BREAKDOWN REQUIREMENTS

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SAFe Practice: Continuous Integration
It is easier to start work than it is to finish it.
It is easier to grow WIP than it is to reduce it

– Don Reinertsen
SAFe PRACTICE: EPIC KANBAN

Opportunity Identification
1. Funnel
   - Product roadmap
   - New business opportunity
   - Cost savings
   - Solution problem

2. Backlog
   - Refine understanding
   - Est. cost of delay
   - Refine effort est.
   - Relative ranking
3. Analysis
   - Solution alternatives
   - Collaboration – Solution management
   - Architects
   - Market/sales/business
   - Development
   - Weighted rank
   - Business case

Evaluation

Implementation

Release planning boundary

Agile Release Trains

Figure 1. Business Epic Portfolio Kanban System

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ADDITIONAL PRACTICE: VISUALIZE CAPACITY
ADDITIONAL PRACTICE: FEATURE FLOW
ADDITIONAL PRACTICE: HOURGLASS
PRINCIPLE: CONTROL FLOW UNDER UNCERTAINTY

Develop on Cadence. Release on Demand.

- Dean Leffingwell
SAFE PRACTICE: PROGRAM CADENCE

Program events create a closed loop system to keep the train on the tracks!
SAFe PRACTICE: PLANNING CADENCE
ADDITIONAL PRACTICE: Unity Day

http://www.prettyagile.com/2014/01/unity-day-creating-one-team-culture.html
ADDITIONAL PRACTICE: PUT EVERYTHING ON CADENCE
A little rudder earlier is better than a lot of rudder late.

- Don Reinertsen
SAFe PRACTICE: INSPECT & ADAPT

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ADDITIONAL PRACTICE: BUBBLE UP

http://www.prettyagile.com/2013/06/bubble-up.html
PRINCIPLE: DECENTRALIZED CONTROL

...emerging information is visible first to the people who are closest to the front lines of the battle.

- Don Reinertsen
SAFe PRACTICE: AGILE RELEASE TRAIN

- Investment themes fund strategy implementation
- Portfolio backlog stitches the themes together

- Agile Release Train delivers solutions

- Local program content decision-making by Product Management based on domain knowledge, customer and team feedback

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ALTERNATIVE PRACTICE: EPIC SPONSORS & FEATURE OWNERS

Epic Sponsor

Feature Owner

Feature Owner

Feature Owner
I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel.

- Maya Angelou
Success with Scaling Agile starts and ends with leadership.

- Em Campbell-Pretty
THANK YOU!

WANT TO KNOW MORE?
- Attend my session with Jean Tabaka on “Creating Agile Tribes”
- Visit my blog: www.prettyagile.com
- Come and say G’day at #Agile2014

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