

# Value Stream Mapping and Kaizen in Agile Retrospectives

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### What Is My Goal for This Talk?

Lean & Agile Principals

Agile Retrospectives

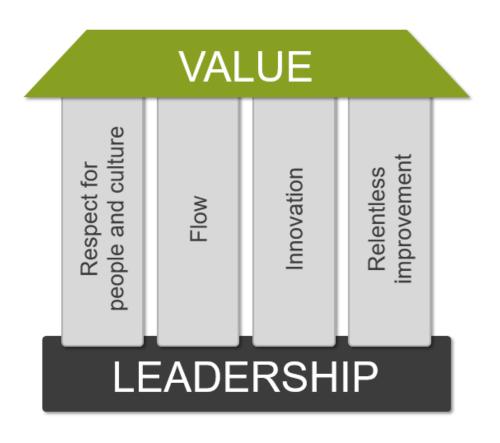
Kaizen

Value Stream Mapping

VSM + Kaizen = © Retrospectives

#### Lean Principles

Specify value
Map the value stream
Establish flow and eliminate waste
Create pull
Continuously improve



### Agile in a Nutshell

Iterative development methodology where requirements evolve through collaboration between the customer and self-organizing teams. Agile business approach aligns software development efforts with business and customer needs.



#### Agile Techniques Employed

From 2015 to 2016, the use of Kanban grew from 39% to 50%; iteration reviews increased from 54% to 81% and iteration planning went from 69% to 90%.

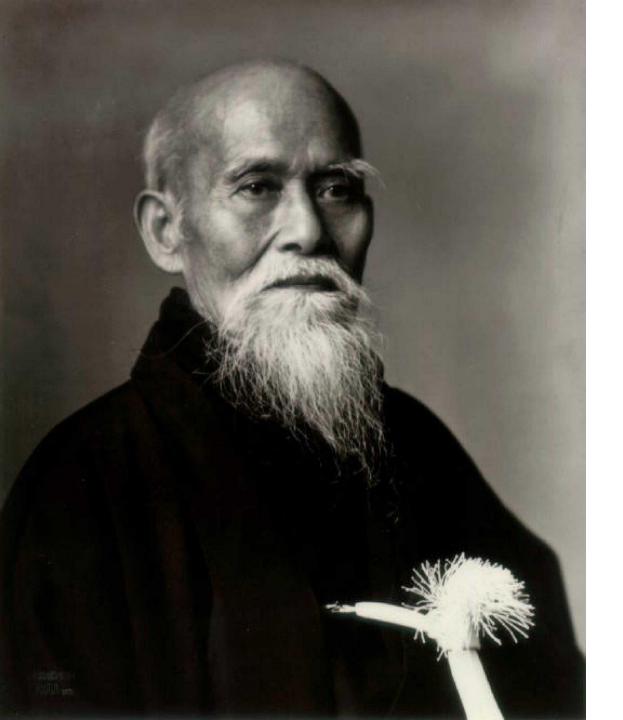


<sup>\*</sup>Respondents were able to make multiple selections.

#### Some Reasons that Retros Fail

- 1. No structure
- 2. Key team members missing
- 3. Retros cancelled because of fire fighting
- 4. No one is talking
- 5. Everyone is yelling
- 6. Nothing ever gets solved





Failure is the key to success; each mistake teaches us something.

Morihei Ueshiba

#### Gemba

Japanese term meaning "the real place."

Lean definition = the place where work is actually being done or value is being created

Go to where the problem is if you want to have a real chance of solving it!

## No one knows best what and how to improve than the people closest to the work!





#### Case Study: Acme Product Sales

Process: Agile (kinda)

Team Size: 17 (3 BAs, 8 DEV, 2 AUTO, 3 QA, 1 PO)

Project: Complete rewrite and consolidation of 2 legacy customer and employee portals into 1 website

Planned release date: Dec 1, 2015

Updated release date: March 15, 2016 ⊗ ⊗

Actual release date: June 1, 2017 🛛 🗗 🖰 🖎

#### 03/03 Retrospective Notes

#### Stop Doing:

Standups take 45 minutes and it's still unclear what everyone is doing all day

Product owner not reviewing Stories before refinement, team committing to "half-done" stories and end up with a ton of rejected stories during review

Vendor shipping rates engine delivered a week late and quality was crap. Team wasted a sprint manually backing out the changes and restoring the old version to their environments.

Team waits forever for CI builds to finish. Need another build server and CI environment but the Operations team is useless.

The team carrying an average of 50% of committed stories into the next sprint, need to increase velocity!

#### Start Doing:

Focus on WIP only, no more status meetings

Can someone get vendor to agreed to set timelines? What is the recourse when things are late or broken?

Devs need to work with operations team to setup a new CI environment

#### Continue Doing:

:: cue crickets::

# IN 6 MONTHS WE SOLVED ALMOST 0 PROBLEMS AS A TEAM



Zen Kai Good Change

#### 10 Principles of Kaizen

- 1. Improve everything continuously.
- 2. Abolish old, traditional concepts.
- 3. Accept no excuses and make things happen.
- 4. Say no to the status quo of implementing new methods and assuming they will work.
- 5. If something is wrong, correct it.
- 6. Empower everyone to take part in problem solving.
- 7. Get information and opinions from multiple people.
- 8. Before making decisions, ask "why" five times to get to the root cause. (5 Why Method)
- 9. Be economical. Save money through small improvements and spend the saved money on further improvements.

Twitter: @OakParkGirl

10. Remember that improvement has no limits. Never stop trying to improve.



## Plan the thing!

Identifying a goal or purpose
Formulate a theory
Defining success metrics
Putting a plan into action

#### Do the thing!

Implement the plan

Execute the improved process

Make the thing

Collect data

## Analyze the thing!

Study the results

Compare against expected results

Inspect the plan

Chart the data

## Adopt or adjust the thing!

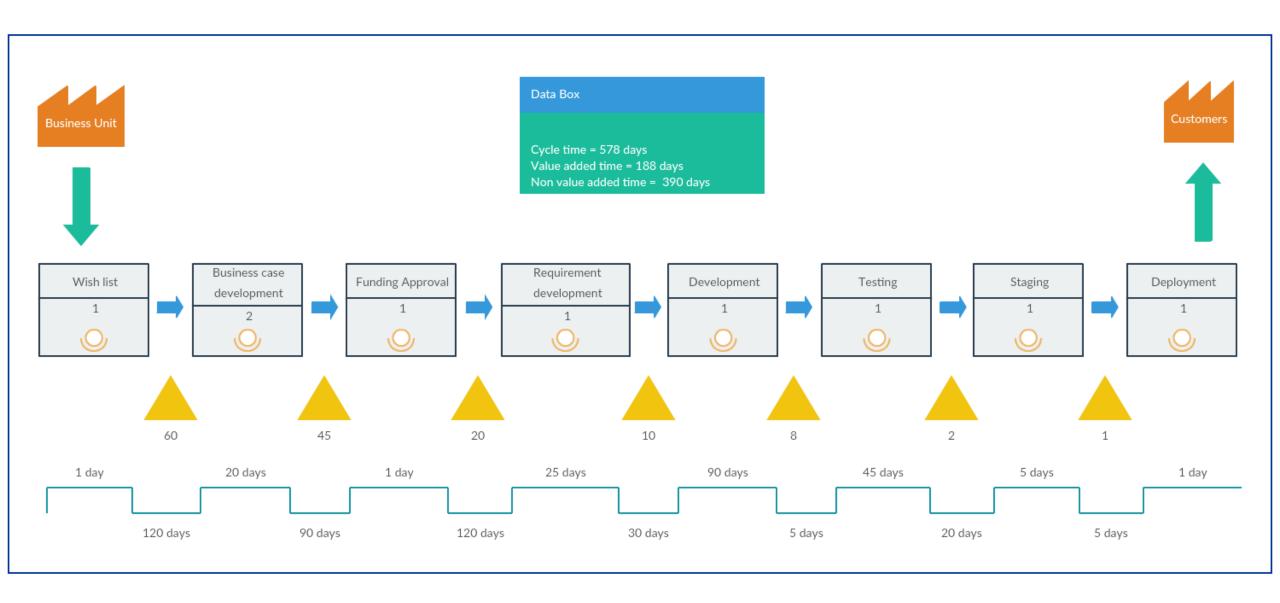
If the plan worked, make that the new way of doing things...

If the plan sucked, then try, try again

# All learnings inform the next PLAN phase, then you do it all over again!



#### VALUE STREAM MAPPING



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#### **VSM** Basics

- 1. Map the current state
- 2. Identify waste and streamline interactions and processes
- 3. Map the ideal state
- 4. Build a plan to get from current to ideal

#### Recurring Retrospective Themes

Quality is lacking

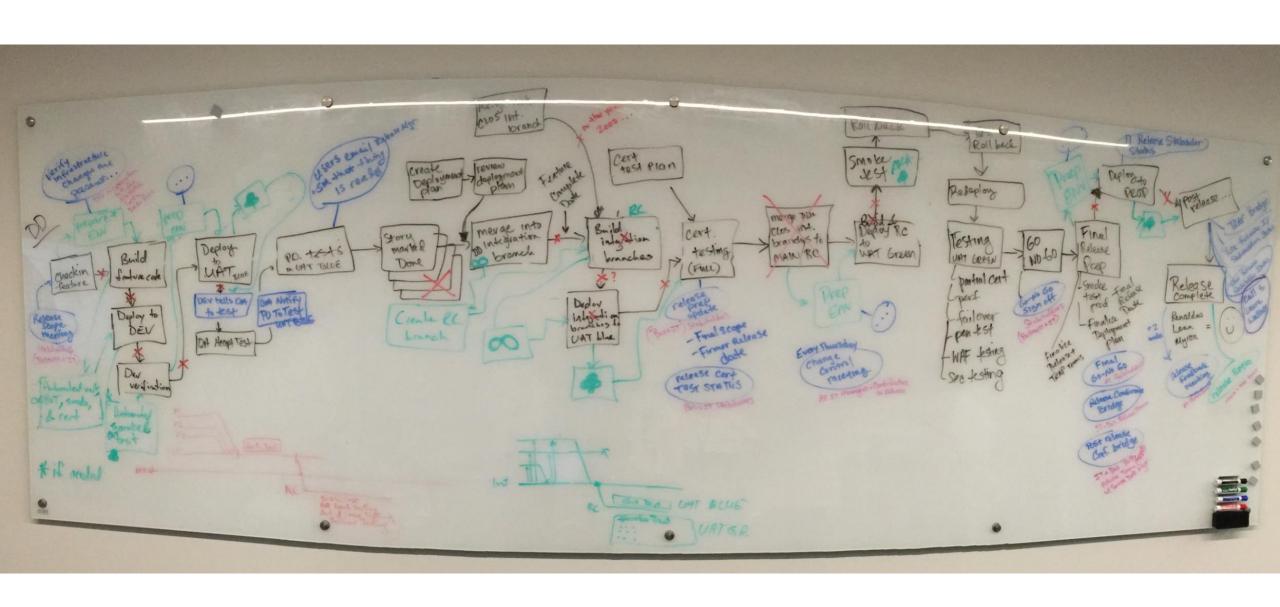
Inadequately investigated requirements

Deliverables aren't meeting Product Owner expectations

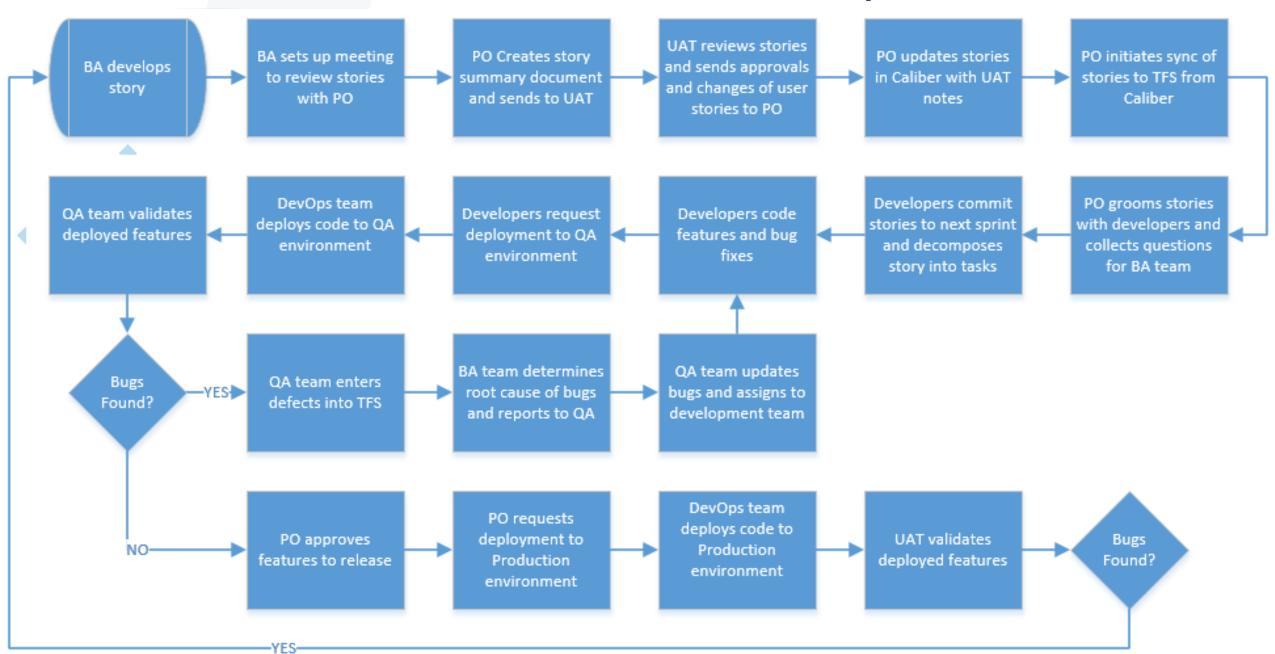
Need for automation

#### Create Your Current State Map

- 1. Identify the product or process
- 2. Define the scope of the mapping project
- 3. Map the process steps
- 4. Include information flow
- 5. Collect process data
- 6. Create a time line



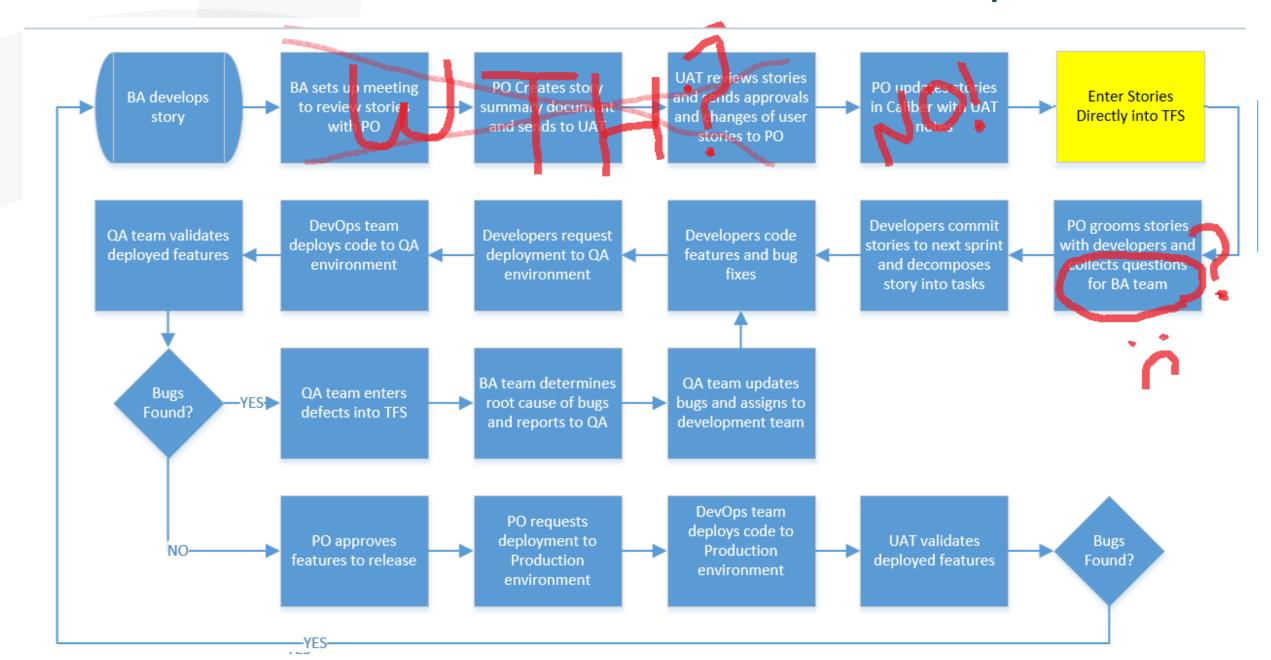
#### Acme Current State Map



#### Identify Waste and Streamline

- Determine what processes, activities, and deliverables to keep
- 2. Determine what processes, activities, and deliverables to replace
- 3. Collaborate to add new processes or activities to replace waste (if needed)

#### Acme Current State → Ideal State Map



#### Create a Plan!

Goal: Increase value delivery

Theory: Requirements development process is disjointed and asynchronous, causing miscommunication of expectations and "assumptions driven development"

Success: Increase value delivery and delight our customers

Action: Establish a process of highly collaborative and deliberate elicitation and validation of requirements by the entire team





#### Keys to Good Agile Kaizen

Make sure the right people are involved at every step

Allocate enough time to these activities

Create a safe space for experimentation and learning

Keep learning and action plan documents someplace visible to everyone

Make sure that leadership is aware of your efforts and "has your back"

#### More Stuff to Check Out

Agile Kaizen: <a href="http://www.proyectalis.com/AgileKaizen/">http://www.proyectalis.com/AgileKaizen/</a>

Agile Retrospectives: <a href="https://pragprog.com/book/dlret/agile-retrospectives">https://pragprog.com/book/dlret/agile-retrospectives</a>

PDCA Primer: <a href="https://deming.org/management-system/pdsacycle">https://deming.org/management-system/pdsacycle</a>

The Improvement Guide:

https://www.amazon.com/exec/obidos/ISBN=0787902578/worldwidedemingw

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