Check my

Maximizing the Delivery of Value and Learning

Tommy Norman





















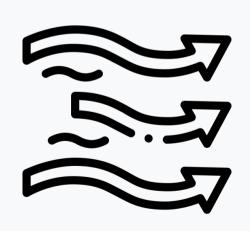








What is flow?





















Waste Removal



Achieving Flow



Identify Waste: Measure your process to find bottlenecks.



Remove Waste: Perform data-driven experiments.



Repeat: Foster a culture of continuous improvement.

Identify Waste

7 Wastes (Muda)





Extra Features







Delays



Task Switching



Defects

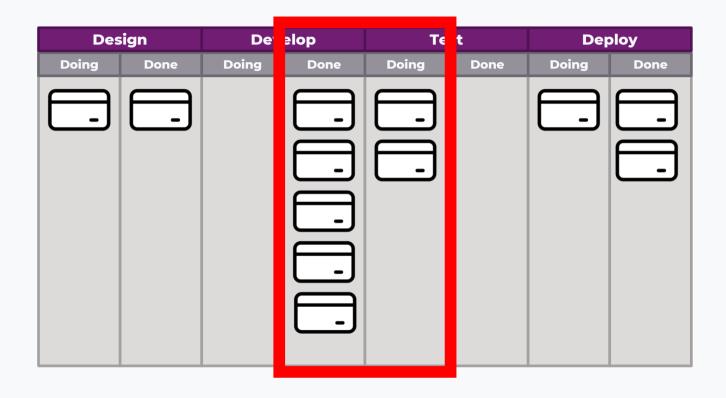
Where do you find the most waste in your current process?



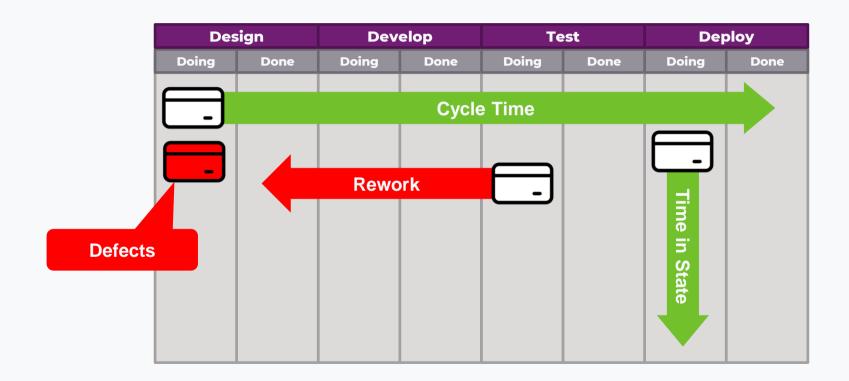
Make Work Visible

| Design | | Develop | | Test | | Deploy | |
|--------|------|---------|------|-------|------|--------|------|
| Doing | Done | Doing | Done | Doing | Done | Doing | Done |
| | - | | | | | - | - |

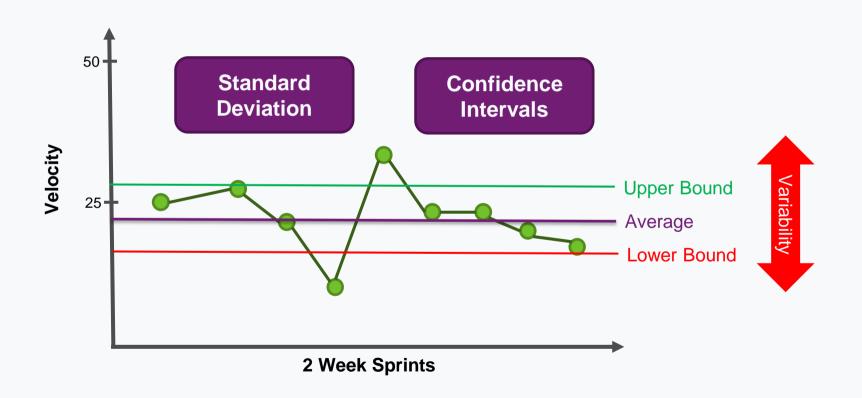
Identify Bottlenecks



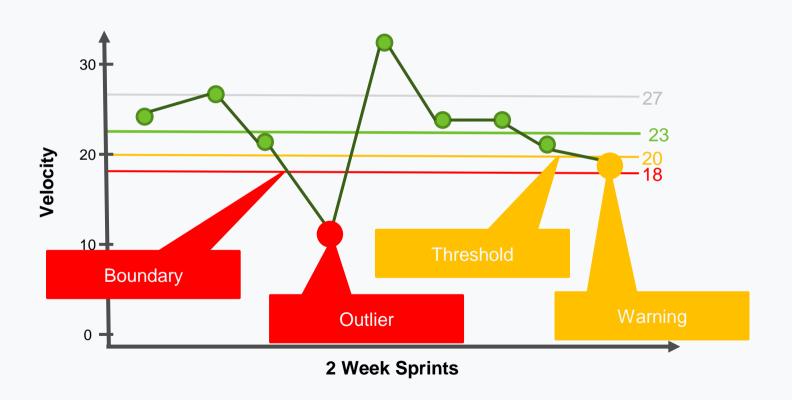
Collect Metrics



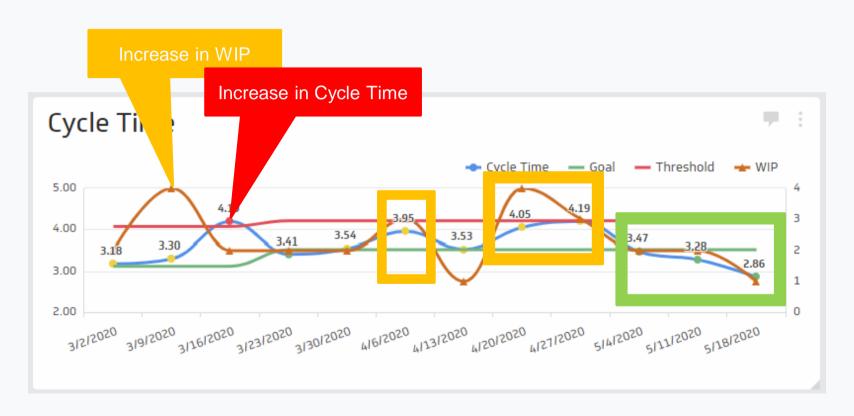
Use All That Math You Didn't Learn



Thresholds And Boundaries



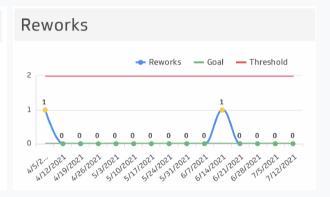
Identify Patterns



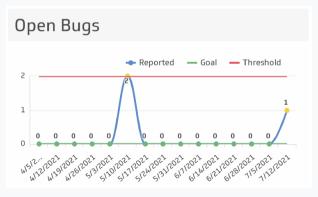
Balanced Metrics











Don't Forget The Team & The Customer





Identify Waste

Make Work Visible

Look For Bottlenecks

Collect Applicable Metrics

Identify Thresholds And Boundaries

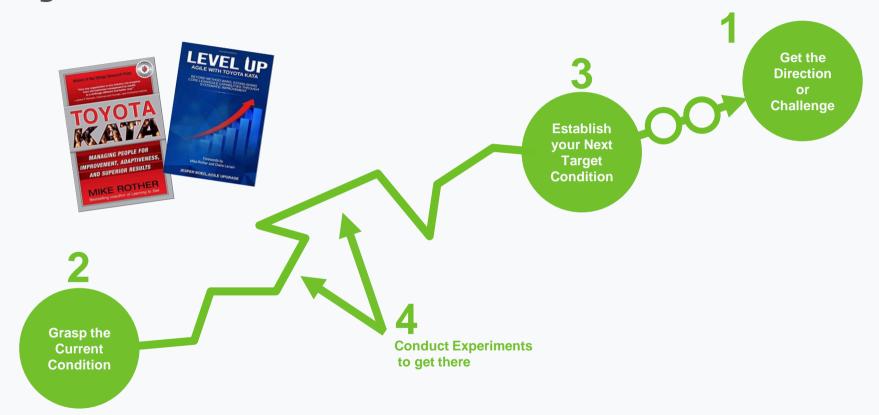
Look For Patterns

Remove Waste

How are you currently addressing waste in your process?



Toyota Kata



PDCA Cycles

Determine next steps What will we now do differently? What will we tackle next?



Plan

Use your metrics to identify issues and prioritize

> What is our current condition? What are our most critical obstacles?



Act

What did we expect to happen? What happened? What did we learn?



Check



What is the target condition we want to reach? What will we try?

Perform experiments to try and resolve those issues

Review results (metrics)

Kata Experiments

Challenge:

Decrease cycle time without negatively affecting quality.

| Metrics | Condition | Condition | PDCA I | PDCA 2 | |
|----------------------|-------------------|-----------|--------|--------|--|
| Cycle Time per Card | 4.0 | 5.25 | | | |
| Guardrail Met | Guardrail Metrics | | | | |
| Reworks per Cards | <2 | 1.5 | | | |
| Bugs per Week | <3 | 2 | | | |
| Cards Per Week | =>1.75 | 1.75 | | | |
| WIP Limit | 4 | 8 | | | |

Obstacles:

- Too much WIP.
- Long deployment times.
- Not enough QA testers.
- Too many reworks.
- Cards are too big.

Experiments:

| l | Date | What did we expect? | What happened? | What did we learn? |
|---|------|---------------------|-------------------|-----------------------|
| l | | | | |
| l | | | | |
| | | | | |

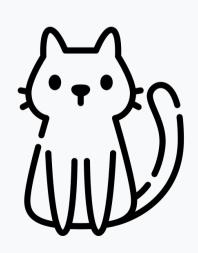
Remove Waste

Set A Challenge Determine Current Condition Set Target Condition Identify & Prioritize Obstacles Perform Experiments Review Results Incorporate Learning

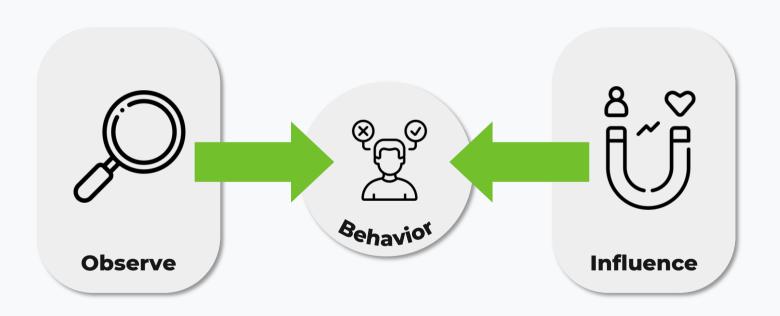
Repeat



What is preventing you from doing this right meow?



Metrics Are About Behavior



Goodhart's Law

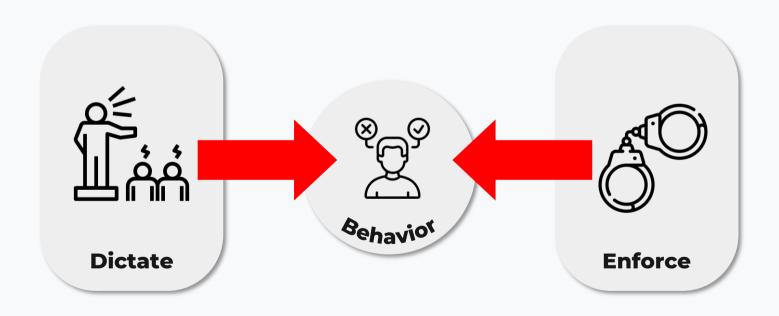
"When a measure becomes a target, it ceases to be a good measure."







Metrics Are About Behavior



Bad Behavior Is Usually About Fear

What happens if I fail?

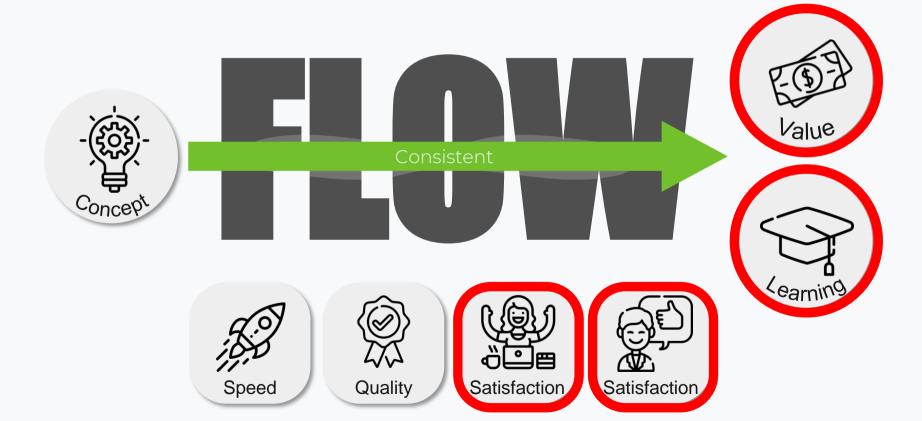
I don't know what's going to happen!



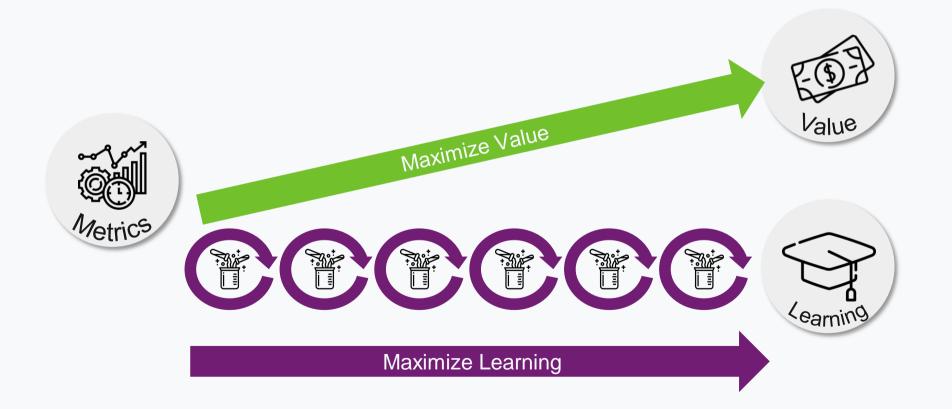
I'm scared to try something new!

I'm scared to tell people bad news!

A Culture Of Continuous Improvement



A Culture Of Continuous Improvement



Wrap Up

Wrap Up

Make Your Process Visible

Measure The Flow Of Value

Let The System Reveal Itself

Identify & Prioritize Obstacles

Perform Data Driven Experiments

Incorporate Learning Into Your Process

Continuously Improve

Thank you!

Email: tommynorman@comcast.net

LinkedIn: **linkedin.tommynorman.com**

O'Reilly: **oreilly.tommynorman.com**

https://www.flaticon.com/authors/ultimatearm

Additional Resources

- My one hour webinar covering the metrics mentioned in this presentation: https://www.youtube.com/watch?v=7hWmv52CQbQ&t=5s
- My Agile Metrics Applied training video on O'Reilly Learning Online that is a deeper dive into the same content above: https://learning.oreilly.com/videos/agile-metrics-applied/9780138039103/ If you do not have an O'Reilly account, you can purchase that video training here:
 https://www.informit.com/store/agile-metrics-applied-video-training-9780138039059
- LeanKit's (now Planview) eBook on how to get started with visualizing your work with Kanban: https://info.planview.com/kanban-roadmap-ebook-lad-en-reg.html
- A nice overview of Toyota's Improvement Kata: https://www.atlassian.com/agile/agile-at-scale/using-improvement-kata-to-support-lean
- Another Toyota Kata article that is a bit more prescriptive in the process, but gives you a good idea of where to start: https://danlebrero.com/2021/01/06/toyota-kata-in-software-development-continuous-improvement/
- Book on using Toyota Kata with software development: https://www.amazon.com/dp/B07NV11YJ8/
- Short overview of the 7 wastes of Lean Software Development: https://medium.com/@markbarbs/the-7-wastes-of-lean-software-development-1a6acbe9d5d7