Making Work Visible

EXPOSING TIME THEFT TO OPTIMIZE WORK & FLOW

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FOREWORD BY TONIANNE DEMARIA

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MAKING WORK VISIBLE

LIST OF FIGURES

PART 3: METRICS, FEEDBACK, AND CIRCUMSTANCES

CONCLUSION: CALIBRATION

LIST OF EXERCISES

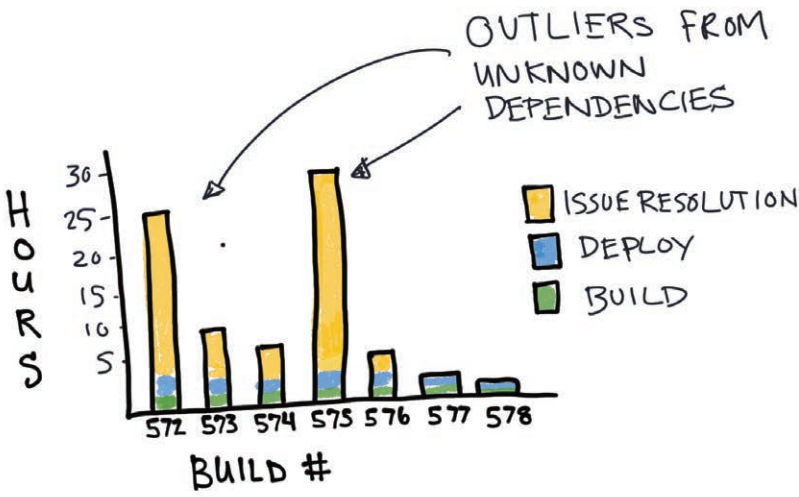


Figure 1. Builds Don't Take That Long

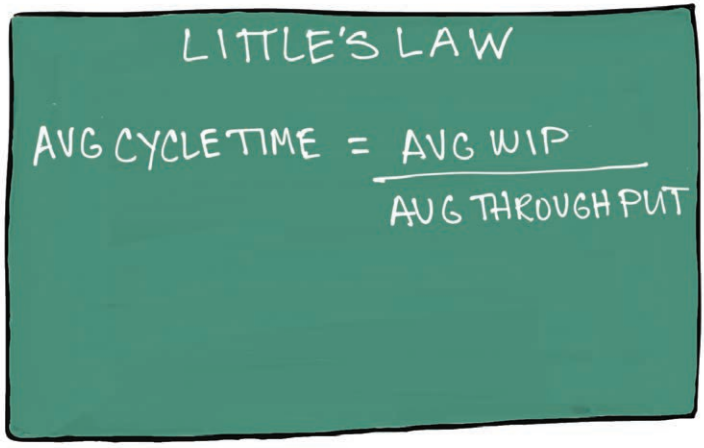


Image 1

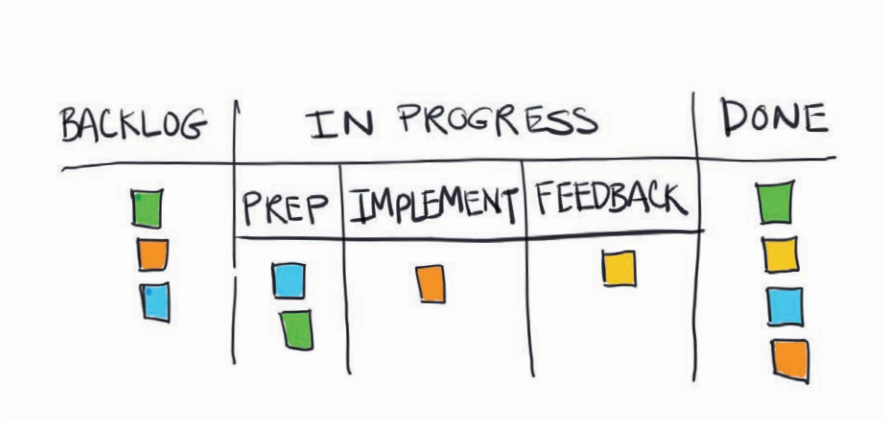
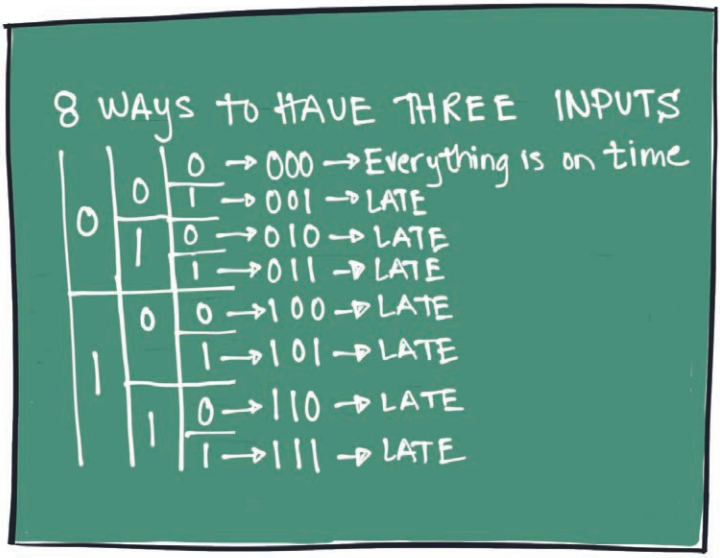


Figure 2. Prep Implement Feedback Board


8 WAYS to HAVE THREE INPUTS
0 → 000 → Everything is on time
0 → 001 → LATE
0 → 010 → LATE
1 → 011 → LATE
0 → 100 → LATE
1 → 101 → LATE
0 → 110 → LATE
1 → 111 → LATE

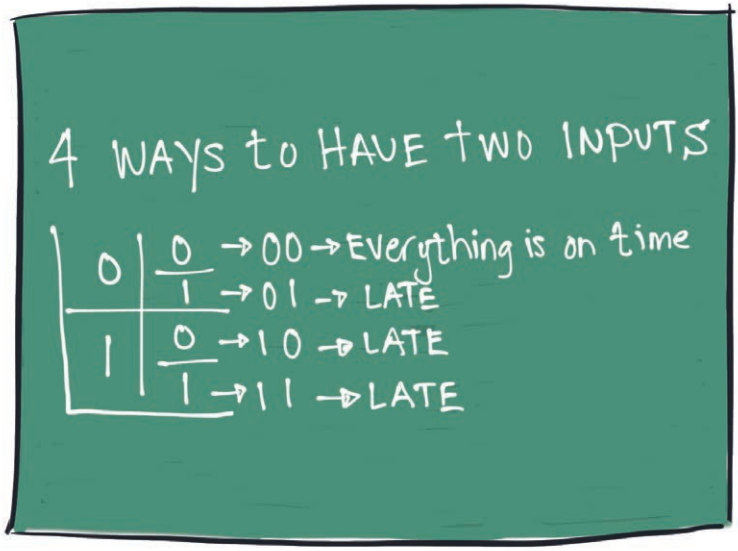

4 WAYS to HAVE two INPUTS
0 → 00 → Everything is on time
1 → 01 → LATE
0 → 10 → LATE
1 → 11 → LATE

Image 2

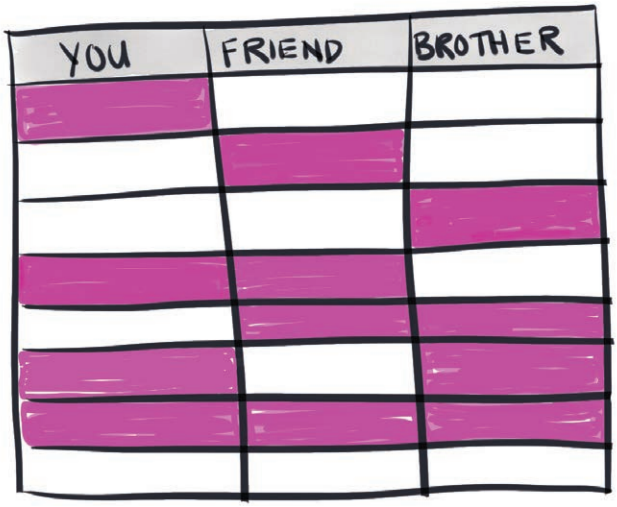


Figure 3. Three Dependency Chart

Image 3

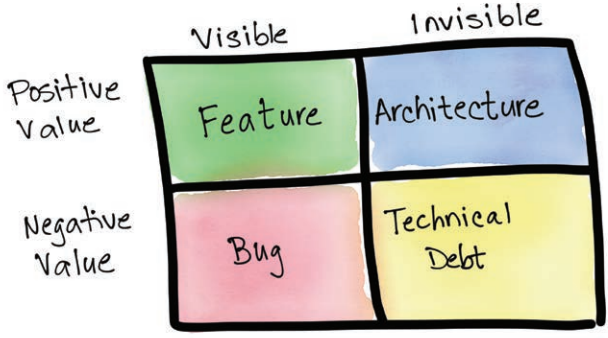


Figure 4. Visibility Grid

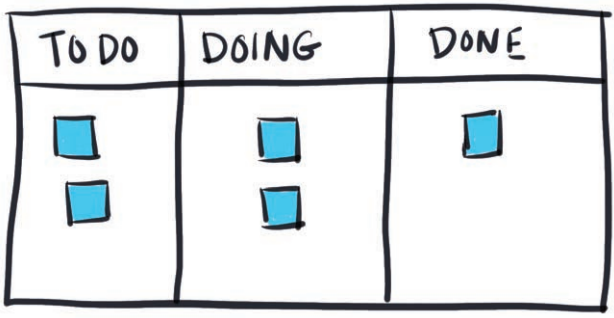
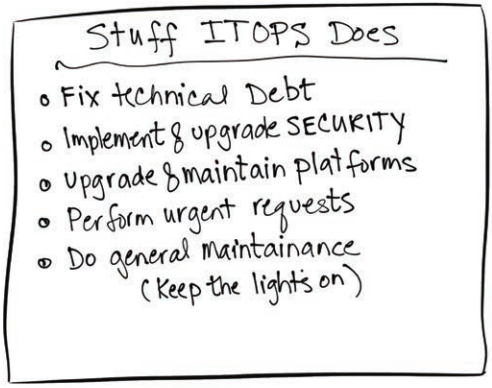


Figure 5. The To Do, Doing, Done Board


Stuff ITOPS Does
Fix technical Debt
Implement & upgrade SECURITY
Upgrade & maintain platforms
Perform urgent requests
Do general maintainance
(Keep the lights on)


MARKETING TEAM
Plan, coordinate & support events, conferences
Manage content (Blogs, webinars, newsletters)
Handle PR, social media
SEO & Demand generation
Content Publishing
Design collater. templates, Branding, presentations

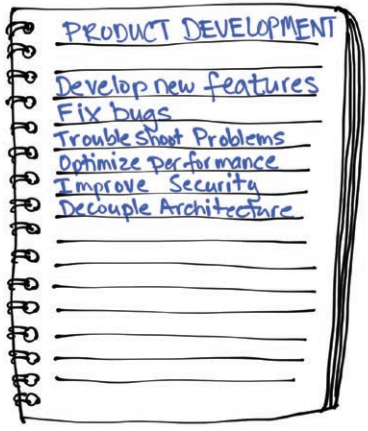

PRODUCT DEVELOPMENT
Develop new features
Fix bugs
Trouble Shoot Problems
Optimize performance
Improve Security
Decouple Architecture

Image 4

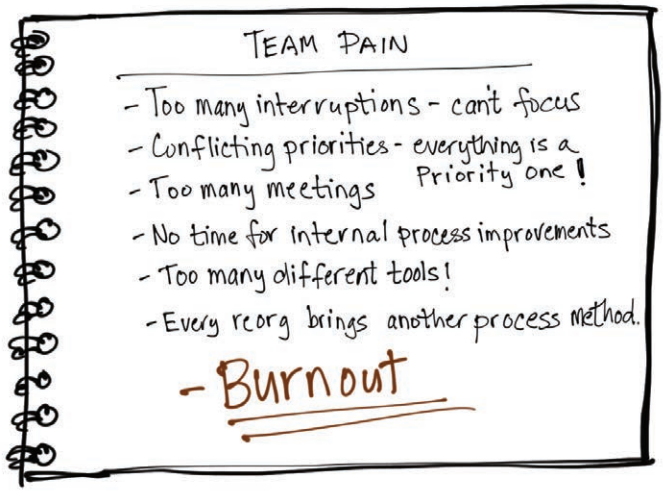


Image 5

Image 6

Figure 6. Balanced Work Item Types

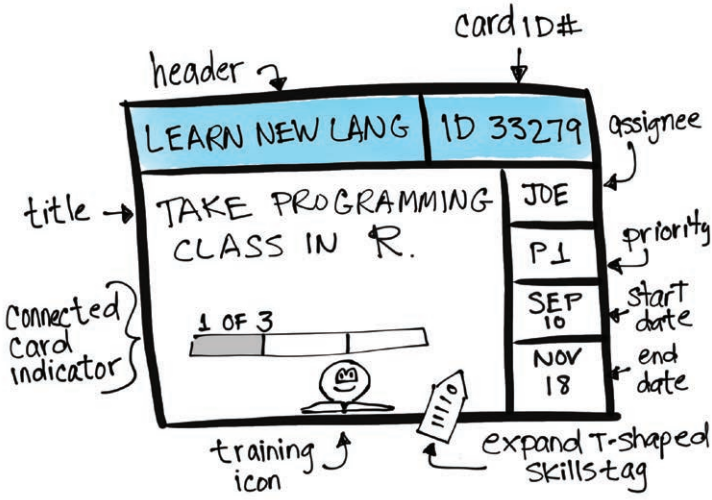


Figure 7. Work Item Type Example

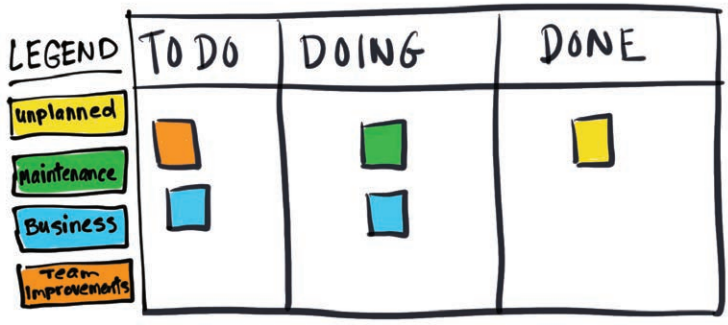


Figure 8. To Do, Doing, Done Board with Colors

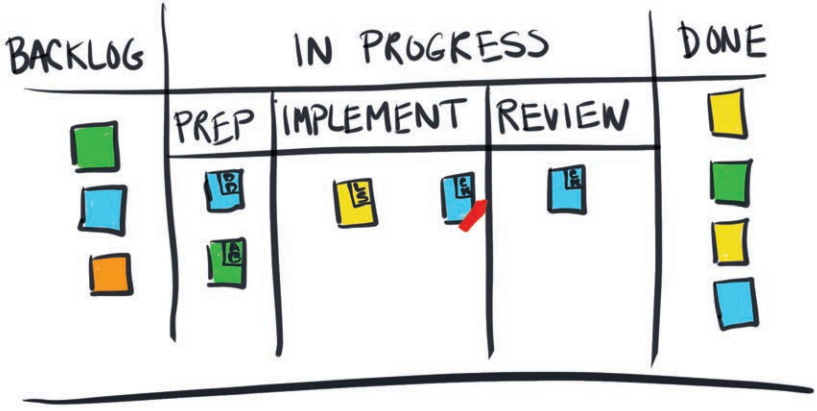


Figure 9. Expanded Doing Column

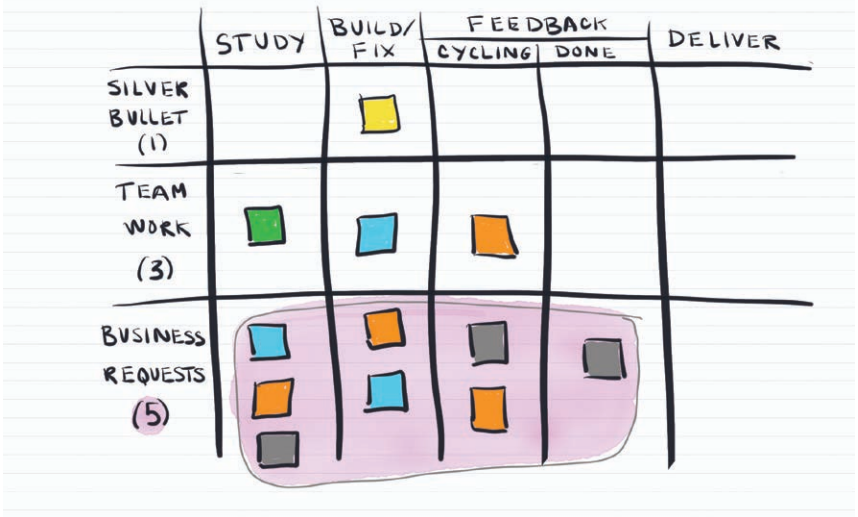


Figure 10. Expose WIP

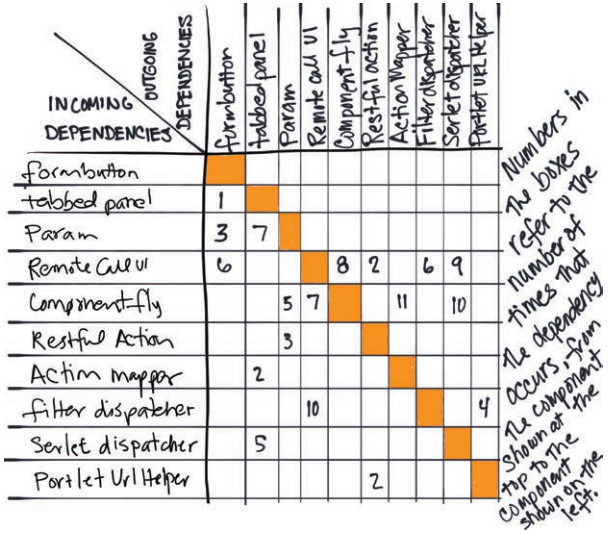


Figure 11. Physical Dependency Matrix

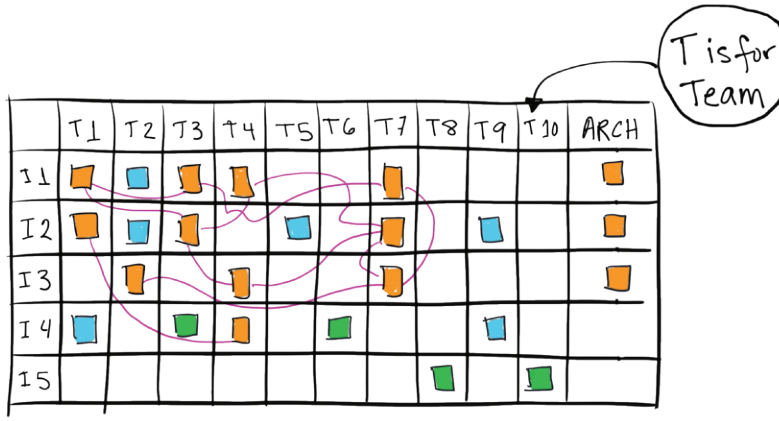


Figure 12. Arts & Crafts Dependency Board

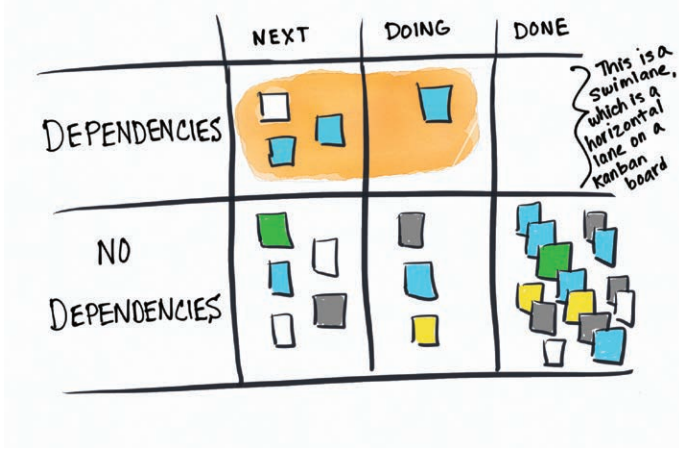


Figure 13. Dependency Swimlane Board

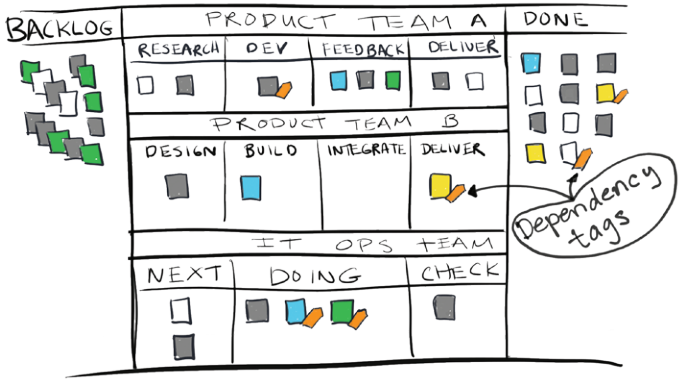


Figure 14. Dependency Tags on Kanban Cards

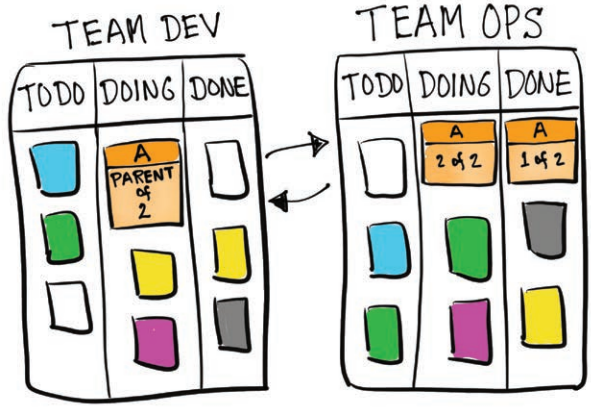


Figure 15. Show Dependencies Between Different Teams

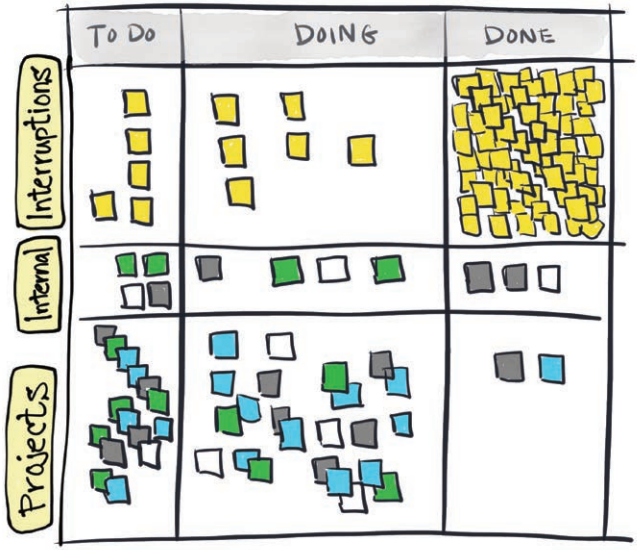


Figure 17. A Study in Interruptions

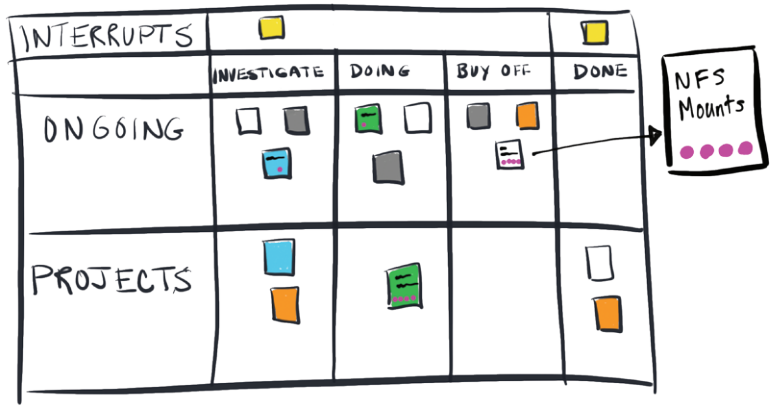


Figure 18. A Study in Pink Dots

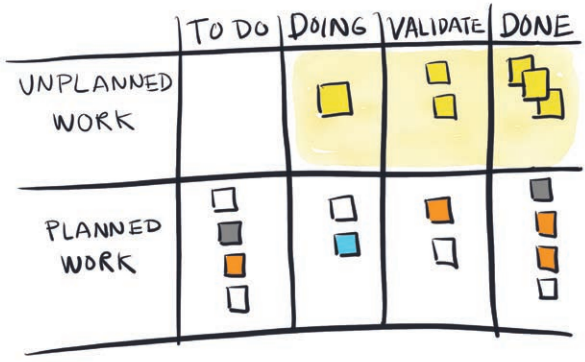


Figure 19. Expose Unplanned Work

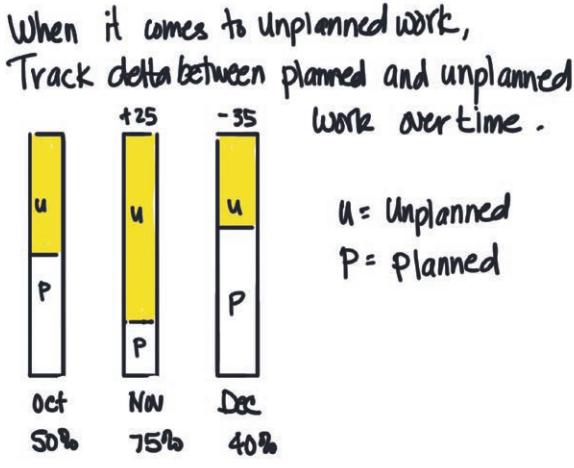


Figure 20. Monthly Delta Trend for Unplanned Work

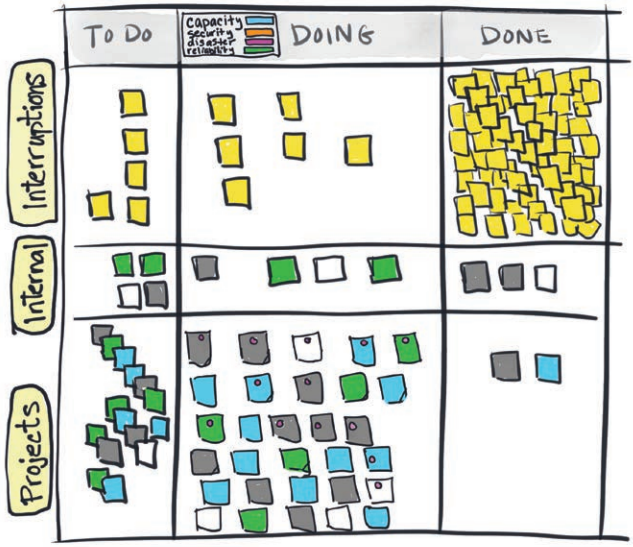


Figure 21. An Experiment in Tagging and Prioritizing

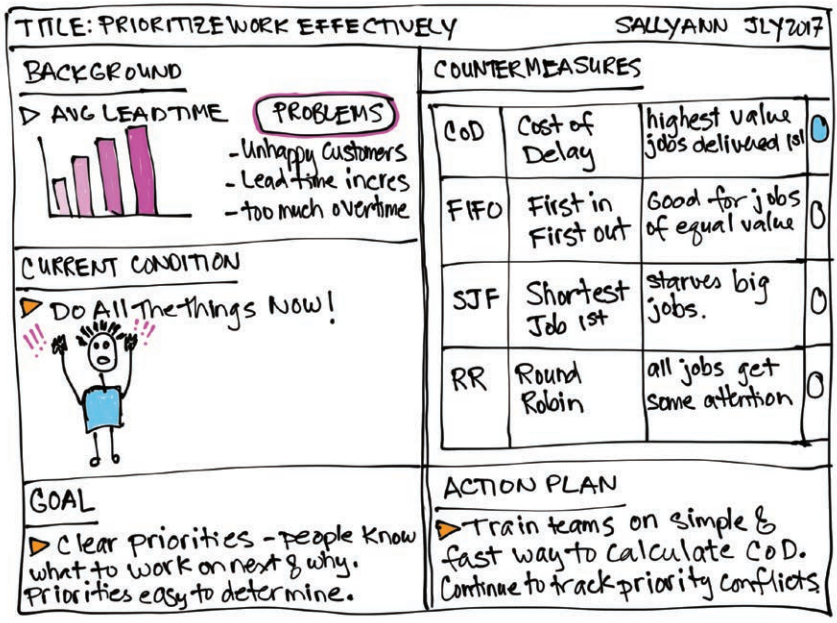


Figure 22. A3 Example

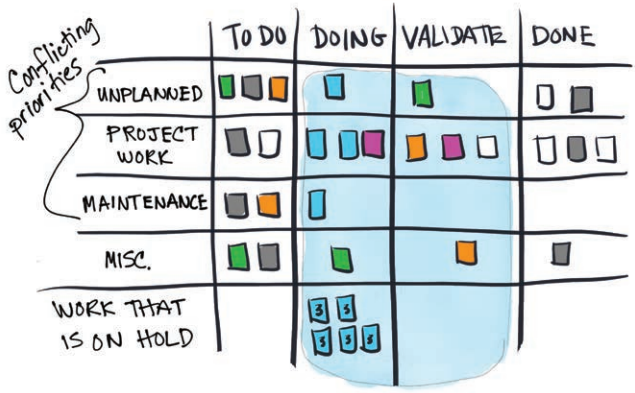


Figure 23. Exposing Conflicting Priorities

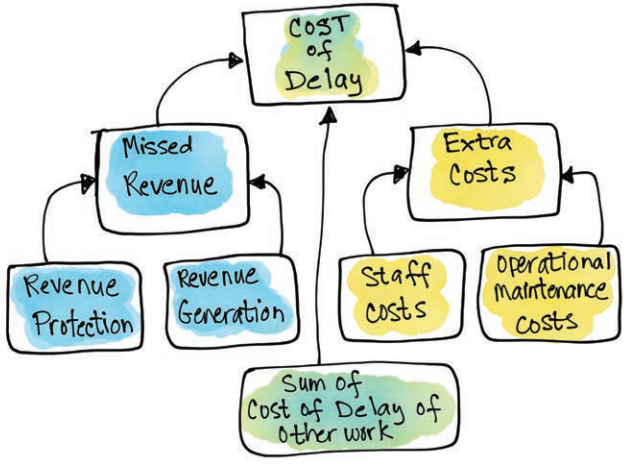


Figure 24. Inputs That Contribute to Cost of Delay

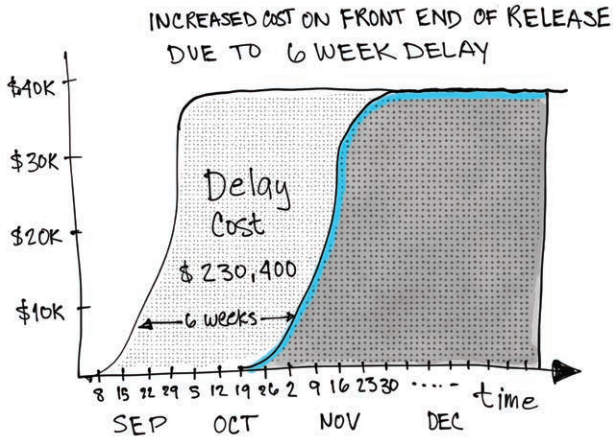


Figure 25. Cost of Delay

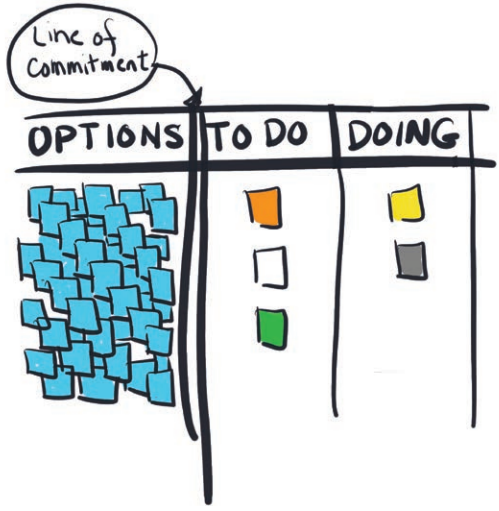


Figure 26. Line of Commitment

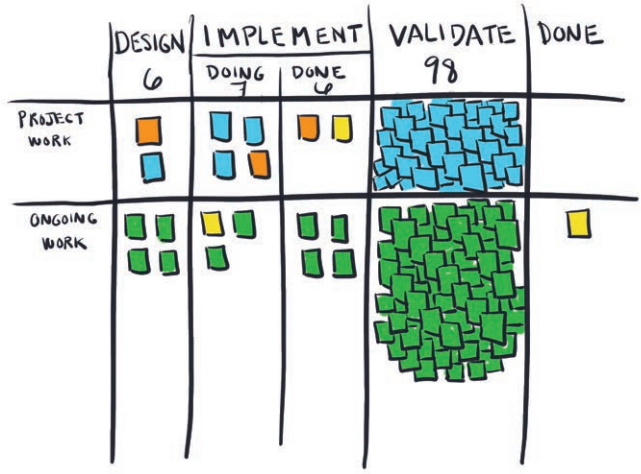


Figure 27. The Validate Pit

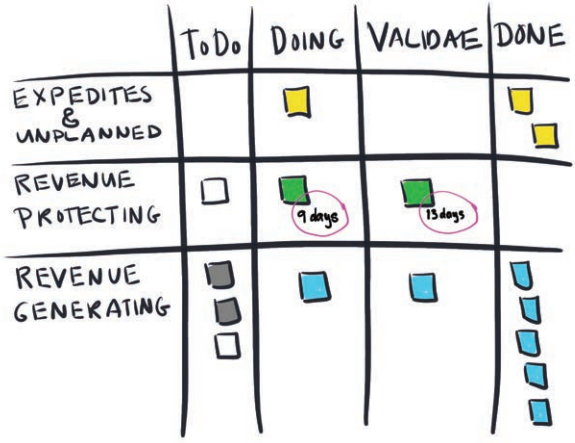


Figure 28. Expose Neglected Work

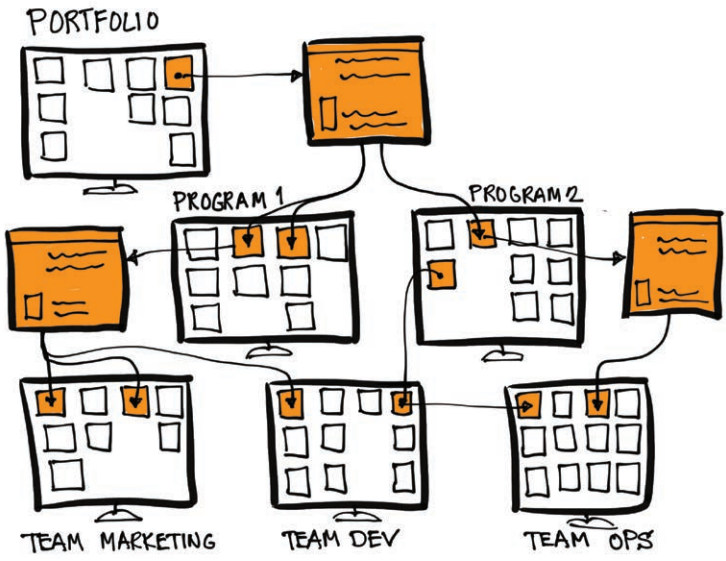


Figure 29. Multi-Level Board Design

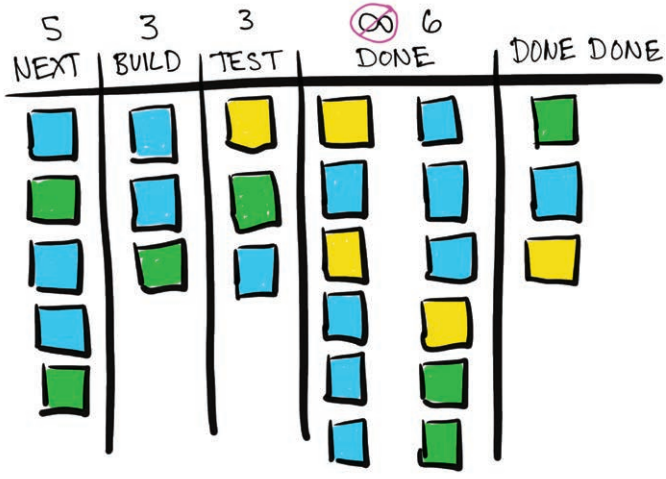


Figure 30. Done Vs. Done Done

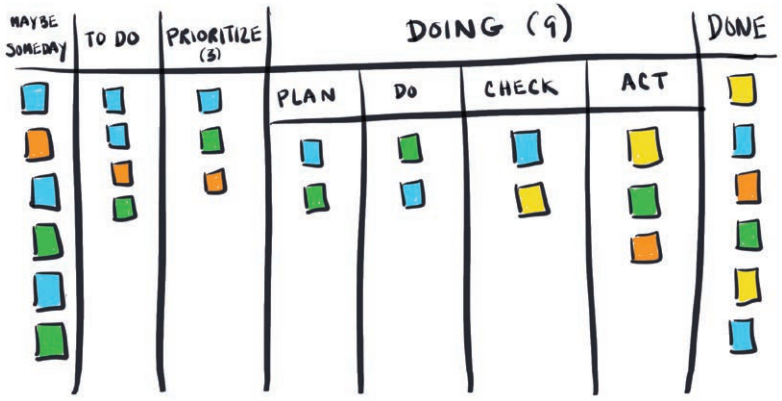


Figure 31. Plan-Do-Check-Act Board

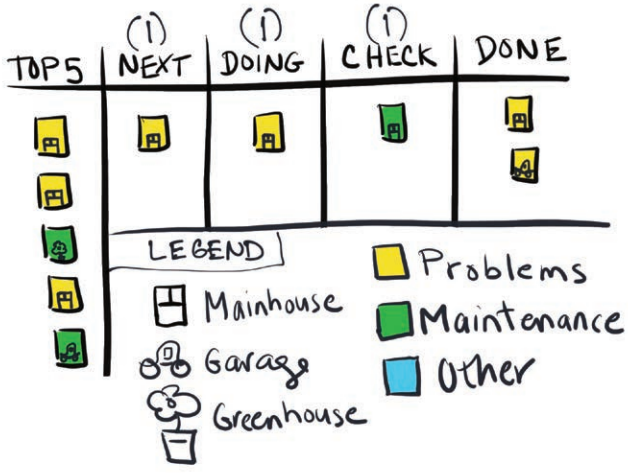


Figure 32. Home Project Board

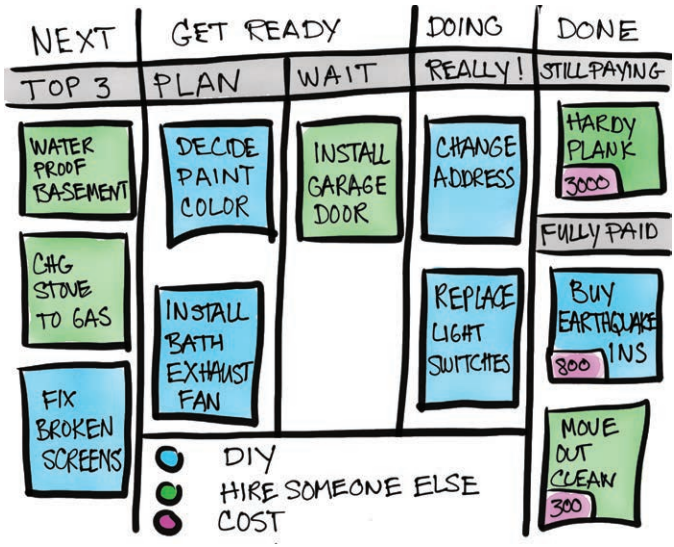


Figure 33. Manage Your Move Board

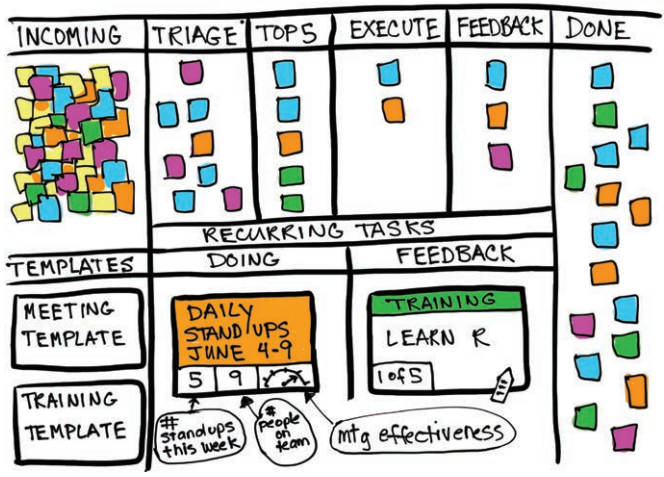


Figure 34. Repetitive Tasks

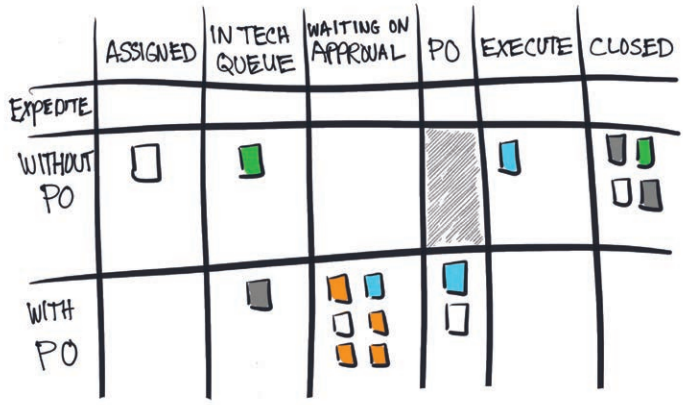


Figure 35. Purchase Order Board Design

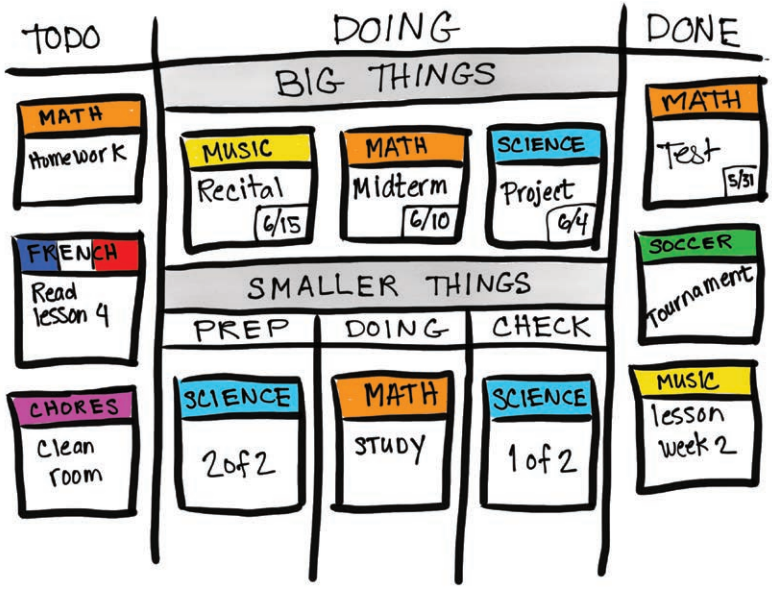


Figure 36. Student Board

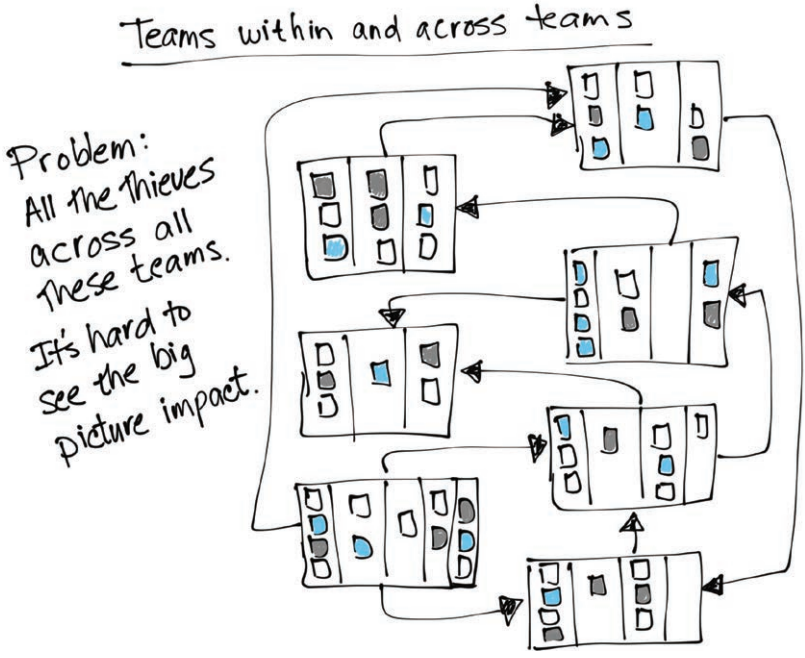


Figure 37. Teams Within Teams Board

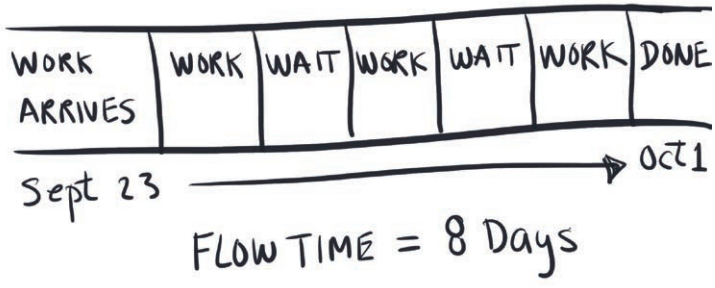


Figure 38. Flow Time Metrics

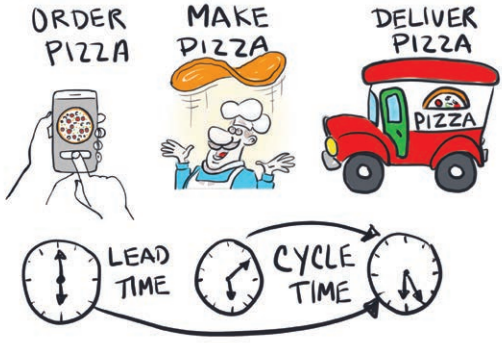


Figure 39. Lead Time and Cycle Time

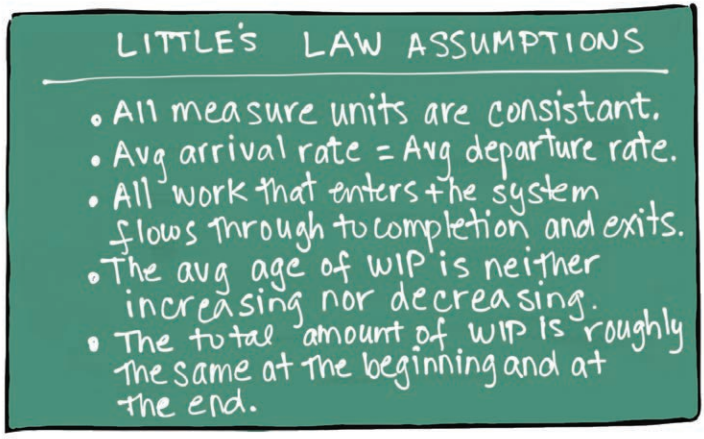


Image 7

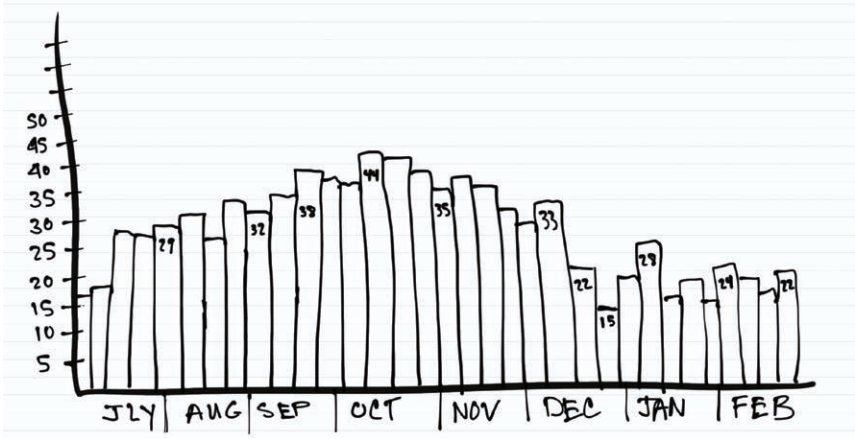


Figure 40. The WIP Report

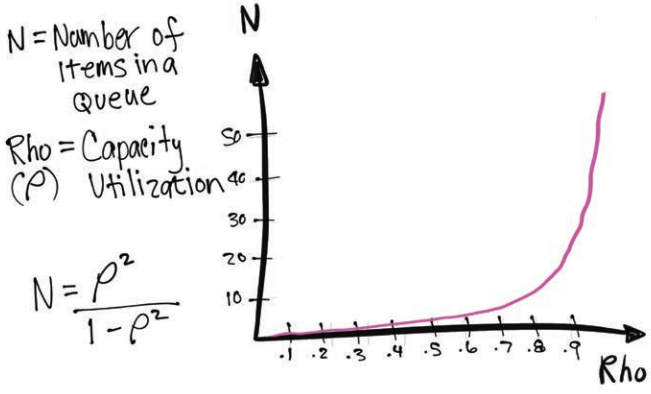


Figure 41. Queuing Theory

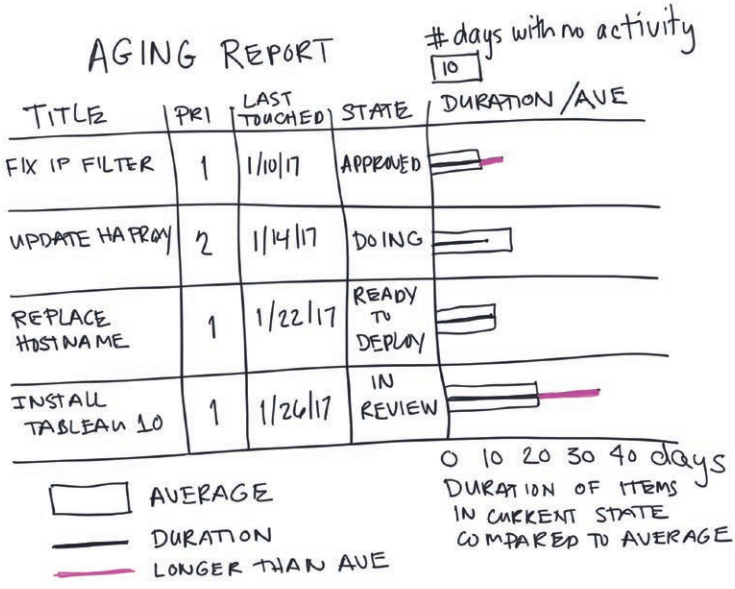


Figure 42. Aging Report

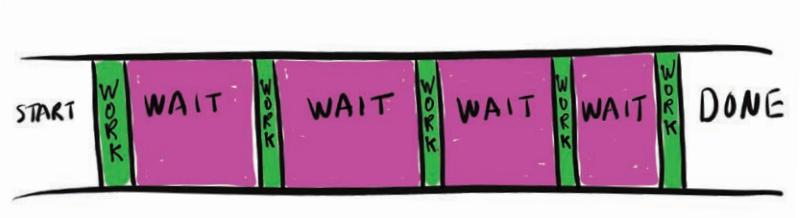


Figure 43. Flow Efficiency

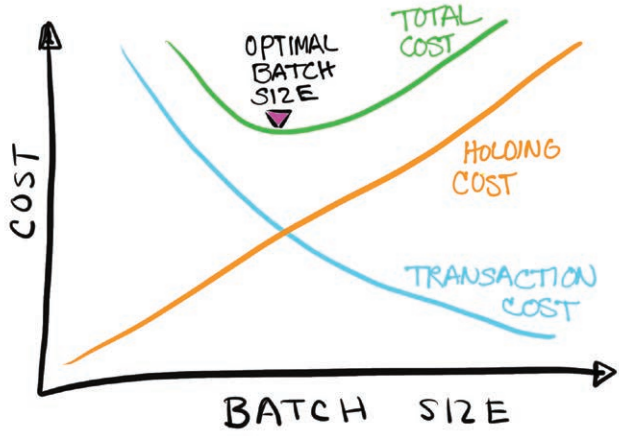


Figure 44. Optimal Batch Size

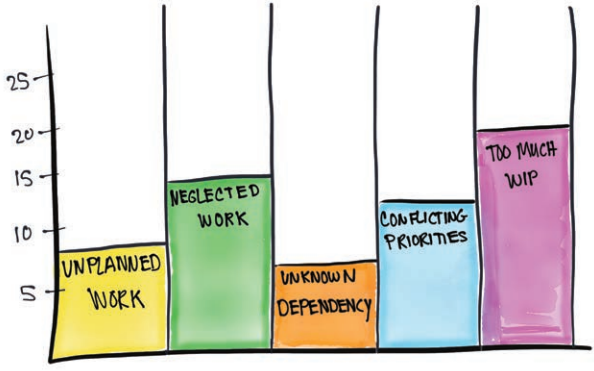


Figure 45. The Original Time Thief O'Gram

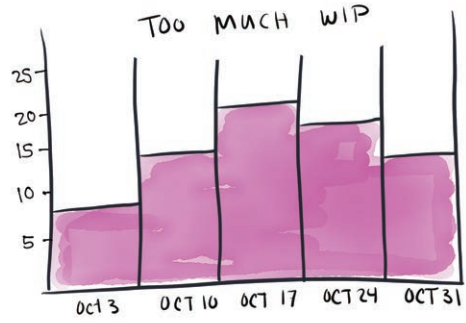


Figure 46. Congregated Time Thief O'Gram

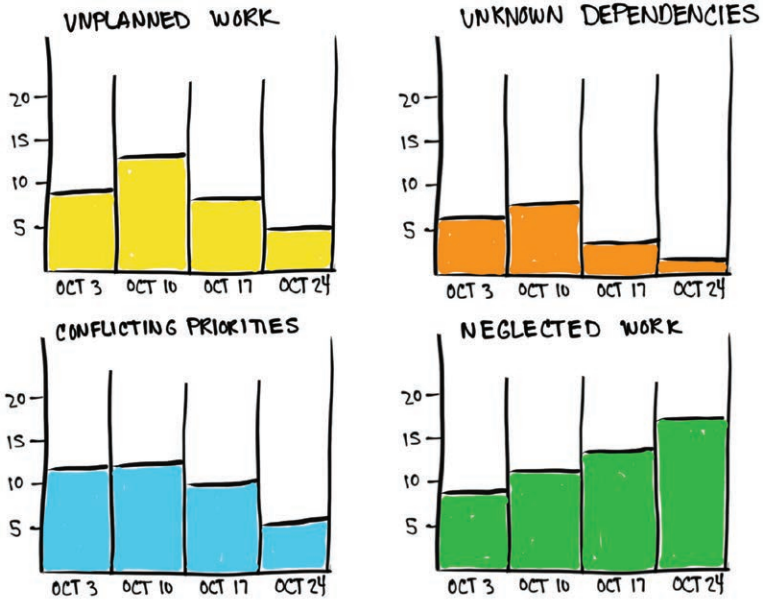


Figure 47. Balanced Scorecard

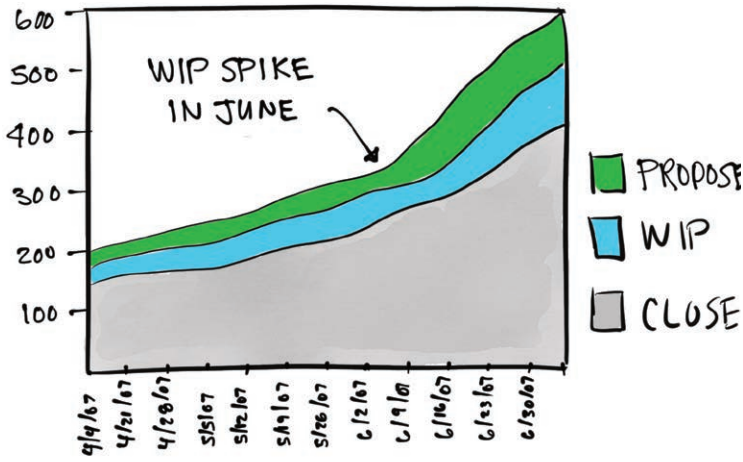


Figure 48. Cumulative Flow Diagram for Ops Review

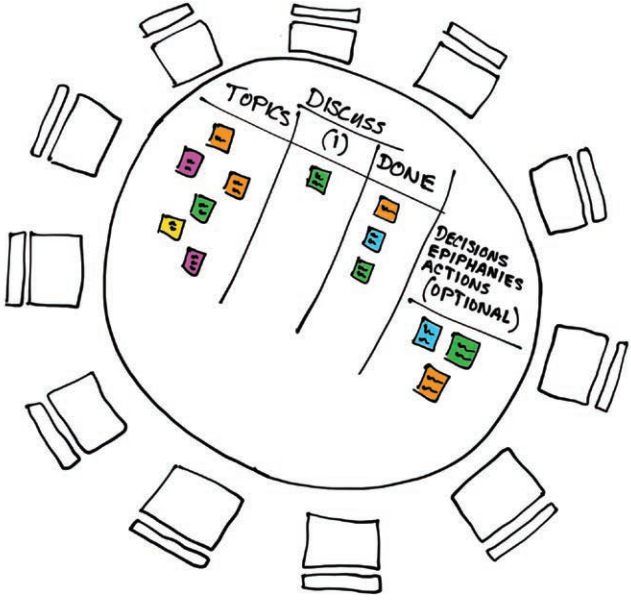


Figure 49. Lean Coffee Setup

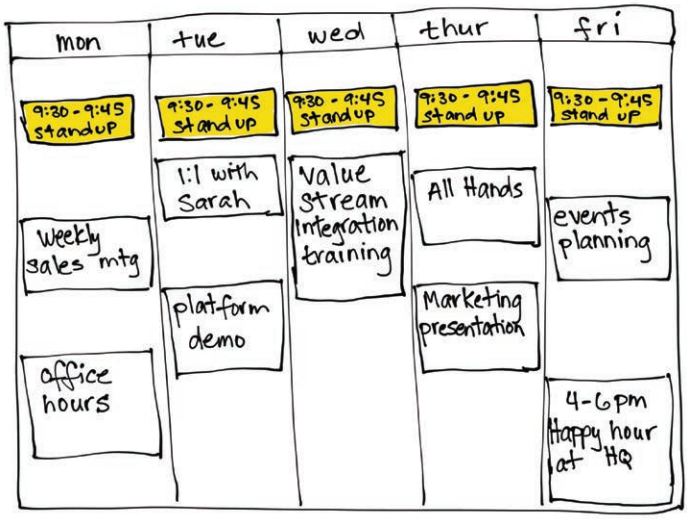


Image 8

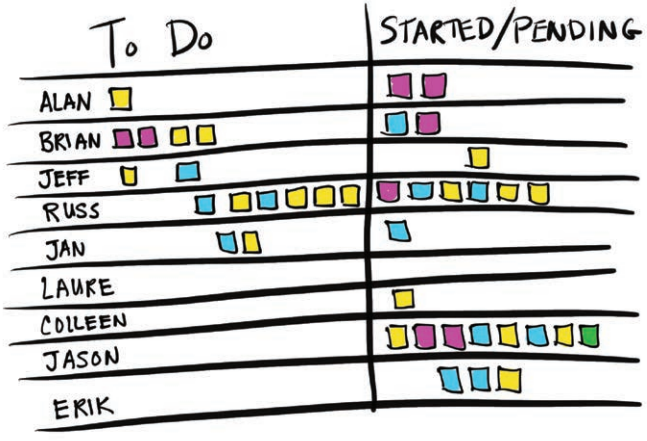


Figure 50. Individually Named Swimlanes

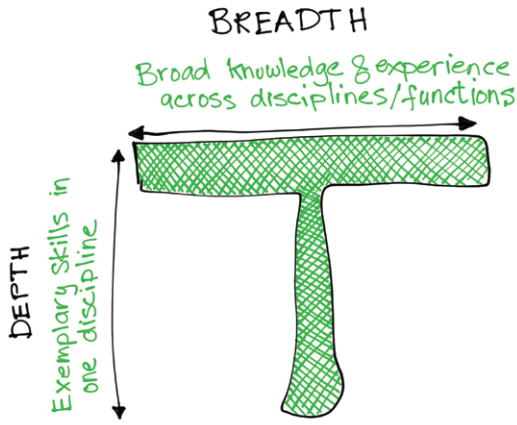


Figure 51. T-Shaped Skills

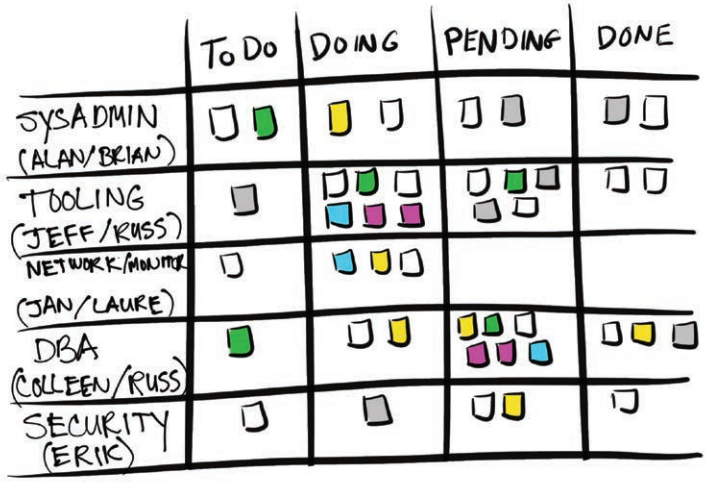


Figure 52. Specialization

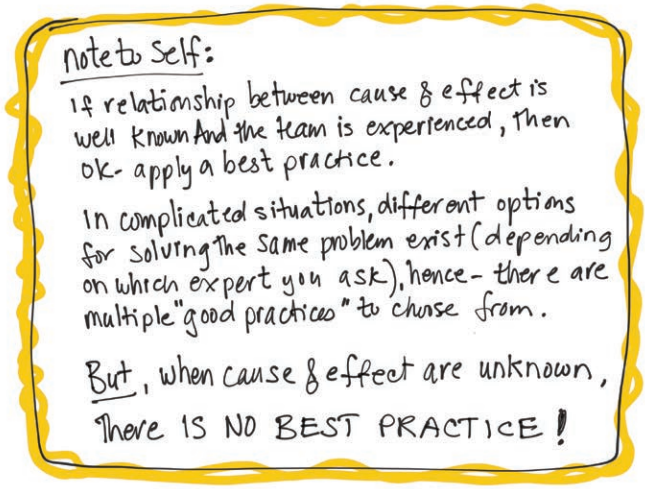


Image 9

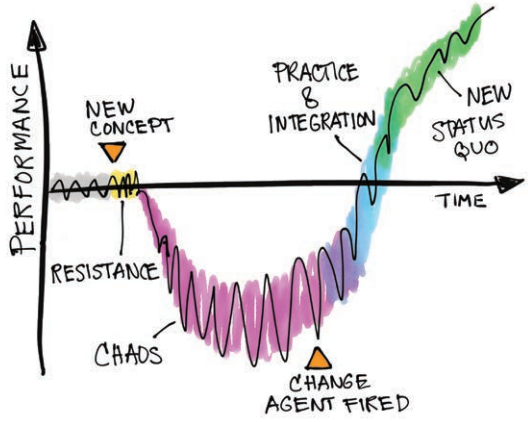


Figure 53. The J Curve

EXERCISES

Demand Analysis

PURPOSE: To identify the kind of work the team does and the related work problems (the team pain and business pain). These items will become inputs to the board design itself in later exercises.

Time: 30 to 60 minutes

MATERIALS:

- Markers
- Flip chart paper or a whiteboard

INSTRUCTIONS: List out the different types of work your team does. Refer to the IT Operations, Marketing, and Product Development team examples on pages 51 and 52 for ideas.

Then, list out any roadblocks preventing you and your team from finishing work. You can take a look at some examples of the team pain points on page 53.

When making your list, be specific. If your IT team's work is late because of constant interruptions due to competing priorities, note it. If your Marketing team's work is late because work piles up in the Design department, note it. This is your time to rant about the things you usually just mutter about. Come on, get it out.

Shining a light on these bottlenecks in your Lean kanban flow design will help make it possible for you to begin to fix the pain.

Next, list out your customer and/or business pain points. See page 55 for inspiration. Occasionally, someone in my workshops will tell me that their business executives are all really happy, and to that I want to call bullshit. No problem is a problem.

Identify Work Item Types/Categories

PURPOSE: **To categorize the different kinds of work in order to support different workflows, different degrees of priorities, and applicable metrics.**

Time: 20 to 30 minutes

MATERIALS:

- 3 x 3 multicolored stickies
- Markers/pens

INSTRUCTIONS: Here's where you and your team decide on what types of work to make visible via cards that will flow across your board. Anywhere from three to seven card types is reasonable. Each card is assigned a color. If your team struggles with wanting more card types, you can create a catch-all category for tasks that have the same workflow, and use tags and icons to differentiate them. Create a legend to refer back to.

Card Design

PURPOSE: **To design useful, relevant, and good-looking work items that will provide people with the necessary information about the work.**

Time: 20 to 30 minutes

MATERIALS:

- 3 x 3 stickies
- Markers/pens

INSTRUCTIONS: Identify the data that you want to capture on your cards and create fields for the data. If you're using an electronic tool, this part of the design will be done for you. If you're using a physical board, consider what fields you'll need to capture thievery problems.

Workflow Mapping

PURPOSE: **To make work visible in order to see what is being worked on, what state the work is in, and the problems associated with potential disruptions and delays to the flow of business value.**

Time: 40 to 60 minutes

MATERIALS:

- Flip chart or whiteboard
- 3x3 multicolored stickies
- Markers/pens

INSTRUCTIONS: First, ask yourself what pain points or hidden information you want to make visible. This is the fun part. Grab your team and, using a big whiteboard or flip chart (if you don't have a whiteboard or flip chart, use stickies on a wall or window), begin with three columns: Options (Backlog), Doing, and Done. Make the Doing column wide so you can break it up into more columns if need be. Place your existing work on the board and discuss what work states you'll want to have visibility on.

Now, let's have a look at how to make the time thieves visible so we can do something about them.

1. List the different types of work you do (demand and where it comes from).
2. Group the items into overall categories of work.
3. Discuss which work type seems to cause the biggest problem. Why is it a source of issues?

This will be your working kanban board to use throughout Part 2 of this book.

EXERCISE

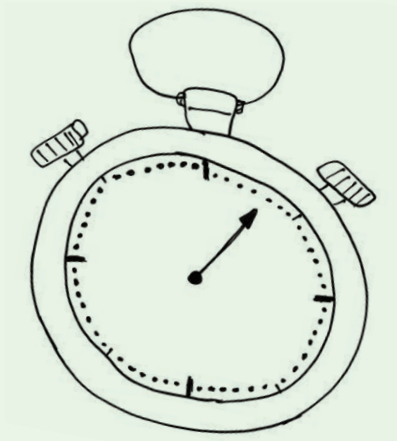
Explore the Five Reasons Why We Take on More WIP

PURPOSE: To acknowledge that many (if not most) people take on more work than they have the capacity for, to hear and empathize with team members on why it happens, and to discuss *countermeasures* (actions taken to counteract problems) for how to deal with this common phenomenon.

Time: 15 to 30 minutes

MATERIALS:

- One pen per person
- Several 3 x 3 inch sticky notes per person
- Stopwatch



INSTRUCTIONS: Participants begin by pairing off with their neighbors and asking each other this question: "Why do you take on more work than you have the capacity to do?"

Allow two to three minutes for the interviewee to respond, while the interviewer jots down one answer per sticky note. Then switch roles.

Once everyone is done, have a group discussion about the reasons people offered. Then, discuss ideas for how to deal with people's desire to say yes when they don't have enough capacity. Be sure to specifically explore what to do when the request comes from someone they like or from a boss.

Variation 1: Ask each person to write their own answers on sticky notes if networking is unnecessary, such as with a group of people who already know each other.

Variation 2: Ask the group to collectively group similar responses together and post them on a wall to bring visibility to the most common responses.

EXERCISE

The "Oh, By the Way" Dependency Matrix

PURPOSE: **To bring visibility to dependencies across teams, to help people anticipate what's headed their way, and to prevent delays from unknown or invisible dependencies.**

Time: 60 to 90 minutes
(possibly longer for very large teams)

MATERIALS:

- Large whiteboard or large paper or wall space
- Sticky notes
- Markers
- Pizza (absolutely essential)

INSTRUCTIONS: Gather up the detectives on your teams. Their mission, should they choose to accept it, is to investigate and visually capture dependencies across all teams that could negatively impact their work.

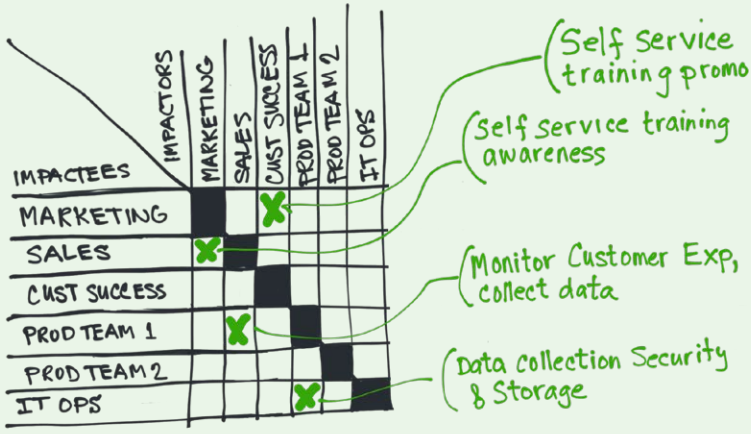


Figure 16. Exercise Example

Draw a large square graph with columns and rows. Using sticky notes, populate the column headers with your team names. Populate the row labels with the same team names.

The rows show teams that are impacted. The columns show teams that impact others (the impactors, if you will).

Identify the outputs from each team that create work for another team and write that number in the intersecting square.

For example, a customer success effort to provide self-service training content impacts Marketing and Sales because of the awareness required to promote and support presales. Sales requires monitoring of the customer experience and collecting customer data for personalized offers and promotions, which impacts Product Team 1 because of changes to the website and data collection. Product Team 1 in turn impacts IT Ops due to security and data storage requirements.

Your job here is to identify dependencies between teams for an important upcoming feature or project, and mark an X in the intersecting square where dependencies exist. Each cell of the matrix represents one or more dependencies between the two intersecting teams. Capture the dependencies themselves on the matrix.

Once your cross-team dependencies are identified in the matrix, discuss which actions can be taken to reduce the risk of breaking or negatively impacting another team's work.

Variation 1: Include upcoming risks in the matrix addition to dependencies.

Variation 2: Instead of teams, call out software components in the dependency matrix.

EXERCISE

The Interruption Reduction Experiment

PURPOSE: **To reduce damage from interruptions using empirical evidence.**

Time: 45 to 60 minutes

MATERIALS:

- Whiteboard
- Markers

INSTRUCTIONS: Gather the team to discuss ways to reduce the cost of interruptions. These might include having a goalie, scheduling office hours, scheduling do not disturb hours, and using pomodoros or a variant involving dedicated ninety-minute sessions. Which of these methods might apply to your team and why?

Come up with a hypothesis and experiment for a week. Regroup after the experiment to discuss your observations on the impact of the experiment on your team. What worked and why? What didn't work and why?

For example: Hypothesis—scheduling office hours will reduce interruptions. Schedule office hours from 1–2 p.m. on Monday, Wednesday, and Friday. Let everyone know you are available during these hours for impromptu questions. This signals people (creates a visual) when you are available and when you are closed for business.

EXERCISE

Visualize Priorities

PURPOSE : To help you bring visibility to competing priorities and bring clarity to how work is prioritized. Most organizations have too many top priorities to achieve the level of focus they need in order to succeed.

Time: 60 minutes

MATERIALS:

- Your current workflow or kanban board

INSTRUCTIONS: Ensure those impacted have a voice in the discussion. Time-box each person's comments to no more than five minutes.

Questions to discuss:

- What is your prioritization policy and how is it visualized?
- How will you signal when work has been prioritized and is ready to be worked on? In other words—where is your line of commitment? How do people know which work to pull?
- How will you visually distinguish between higher and lower priority work?

EXERCISE

Create an Aging Report

PURPOSE: **To improve the flow of value by making stale work visible. An aging report shows WIP that is stale.**

Time: 40 to 60 minutes

MATERIALS

- Large whiteboard or large paper or wall space
- Sticky notes
- Markers
- Computer (and, of course, a pizza)

INSTRUCTIONS: Query your work-tracking tool to find high-priority, yet partially completed work that has not moved or been updated in thirty days. If thirty days results in a huge list, then increase to sixty or ninety days. Randomly select seven to eleven of those high priority items. Statistically, seven to eleven is sufficient—as long as it's truly a random sample set.

For each of the seven to eleven items, note the following:

- The number of days the item has been stale (not been updated or moved or made any progress).
- The average cycle time for cards of a similar work item type.
- How many days the item has been in progress in comparison to other similar items.

Now, write down what happens if this item continues to be delayed for another week. Consider lowering your WIP limit and reprioritizing your WIP based on what might happen if the work is delayed. Identify the utmost valuable work currently on your board and separate out the lower value items. If possible, do an improvement blitz to push through the one highest priority item to get it delivered. Improve flow by making work visible. Remember the goal is to improve flow by making important, stale work visible.

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