**Go with the Flow:** A Kanban Simulation

**Timing:** approx. 45 minutes

* Activity Introduction: 5 min.
* Round 1: 10 – 15 min.
* Debrief of round 1: 5 min.
* Round 2: 10-15 min.
* Activity Debrief: 5 min.

**Overview**A two-round simulation that illustrates the value of moving beyond simply visualizing your work and focusing on flow.

**Resources (for each group of 4)**

* Table with 4 chairs (with a little extra space on the ends)
* One printed copy of the linked PDF containing:
  + 1 Instruction Sheet
  + 4 Lane Headers with Definition of Done
  + 6 Post it notes (or index cards or scraps of paper)
  + 2 sets of 16 cards, each with 8 Data cards and 8 Content cards.
  + 1 each of Sales Log and Cycle Time Log
* Writing instruments for each person
* Access to a clock or timer with hours and minutes displayed

**Learning Points:**

* Push systems interrupt completion of in-progress work. When work is difficult, it takes longer to recover from the interruptions.
* Failure to limit how much work we start causes work to take longer to complete.
* Failure to limit work brings a higher likelihood of starting work that won’t get finished.

**Round 1 Setup**

1. Cut out card sheets into individual cards
2. Put Lane headers in this left to right order: Prioritize, Answer, Verify, Measure. Cards to choose from will be placed to the left of the prioritize column and finished cards are placed to the right of the Measure column.
3. Put logs in the Measure lane.
4. Ensure each lane has a writing utensil.
5. Ensure clock or stopwatch is displayed so the room can see it during the simulation.

**Round 1 Steps**

1. Form teams of 4 people at each game table, one each in the Prioritize, Answer, Verify, and Measure lanes.
2. Teams will move cards through lanes, from left to right, by completing the definition of done in each.
3. **Because our stakeholders need to know we’re on top of everything, each card must be *started* as soon as it enters a lane, even if other cards are already in progress. Once you start it (defined as one question answered), you can continue work in any order.**
4. At end of round, hold a retrospective:
   1. How many cards were started, but not finished?
   2. What were the total sales? (minus $100 for each defect)
   3. What was the median cycle time?
   4. How did the group feel about the work process?
   5. What could be improved?

**Round 2 Steps**

1. Add Doing and Done sub-lanes to each of the *Prioritize*, *Answer*, and *Verify* Lanes using the post-it notes (or index cards or scraps of paper)
2. Add WIP Limits by one of the following methods:
   1. By Lane:Add numerical limits to each parent lane except *Options* and *Completed*.
   2. Per Card Type: The Prioritizer will be responsible for ensuring that we only start a card if the limit for the type is not exceeded.
   3. Per Person: Each person is responsible for adherence to their limit. Works best if teams self-organize and aren’t assigned to a single lane. This is the most complex method to do in this simulation.
   4. Team decides the numbers they will use regardless of method chosen.
3. Put 2nd set of cards to the left of the Prioritize lane.
4. Move cards through the process as in Phase 1. The only rule changes are:
   1. don’t push work to the next lane
   2. adhere to WIP limits.
5. Discuss how round 2 compared with round 1. What did you learn?
6. What would happen if your WIP limits were higher or lower?