When will it be done? ProKanban.org

FLOW MEASURES

THEY ARE A REFLECTION OF THE KANBAN SYSTEM'S CURRENT HEALTH AND PERFORMANCE

THEY HELP INFORM DECISIONS ABOUT HOW VALUE GETS DELIVERED

"STARTED" AND "FINISHED" REFER TO HOW THE KANBAN SYSTEM MEMBERS HAVE DEFINED THOSE TERMS IN THE DOW !!

&

THEY REPRESENT ONLY THE MINIMUM REQUIRED FOR THE OPERATION OF A KANBAN SYSTEM !

THE NUMBER OF WORK ITEMS STARTED BUT NOT FINISHED	WORK IN PROGRESS (WIP)
THE NUMBER OF WORK ITEMS FINISHED PER UNIT OF TIME. NOTE THE MEASUREMENT OF THROUGHPUT IS THE EXACT COUNT OF WORK ITEMS.	THROUGHPUT
THE AMOUNT OF ELAPSED TIME BETWEEN WHEN A WORK ITEM STARTED AND THE CURRENT TIME.	WORK ITEM AGE (WIA)
THE AMOUNT OF ELAPSED TIME BETWEEN WHEN A WORK ITEM STARTED AND WHEN A WORK ITEM FINISHED.	CYCLE TIME

INTRODUCTION TO FLOW MEASURES

WIP: The number of work items started but not finished.

Work Item Age: The amount of elapsed time between when a work item started and the current time.

Throughput: The number of work items finished per unit of time. Note the measurement of throughput is the exact count of work items.

Cycle Time: The amount of elapsed time between when a work item started and when a work item finished.

KANBAN VISUAL GUIDE

ProKanban.org

FLOWSPHERE
SCALED AGILE PROFESSIONALS

CO-CREATED BY PRABHAT PANDEY & NAGESH SHARMA

KANBAN FOR [EVERYONE]
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DEFINITION

KANBAN IS A STRATEGY FOR OPTIMIZING THE FLOW OF VALUE THROUGH A PROCESS THAT USES A VISUAL, PULL-BASED SYSTEM.

THE STRATEGY OF KANBAN IS TO OPTIMIZE VALUE BY OPTIMIZING FLOW.

Effectiveness	Efficiency	Predictability
Optimize	Optimize	Optimize
AN EFFECTIVE WORKFLOW IS ONE THAT DELIVERS WHAT CUSTOMERS WANT WHEN THEY WANT IT.	AN EFFICIENT WORKFLOW ALLOCATES AVAILABLE ECONOMIC RESOURCES AS OPTIMALLY AS POSSIBLE TO DELIVER VALUE.	A PREDICTABLE WORKFLOW MEANS BEING ABLE TO ACCURATELY FORECAST VALUE DELIVERY WITHIN AN ACCEPTABLE DEGREE OF UNCERTAINTY.

CORE PRACTICES

DEFINING AND VISUALIZING A WORKFLOW

OPTIMIZING FLOW REQUIRES DEFINING WHAT FLOW MEANS IN A GIVEN CONTEXT. THE EXPLICIT SHARED UNDERSTANDING OF FLOW AMONG KANBAN SYSTEM MEMBERS WITHIN THEIR CONTEXT IS CALLED A *DEFINITION OF WORKFLOW (DOW)*

1. A DEFINITION OF THE INDIVIDUAL UNITS OF VALUE THAT ARE MOVING THROUGH THE WORKFLOW. *(WORK ITEMS (OR ITEMS).*
2. A DEFINITION FOR WHEN WORK ITEMS ARE *STARTED* AND *FINISH* (IF) WITHIN THE WORKFLOW. YOUR WORKFLOW MAY HAVE MORE THAN ONE STARTED OR FINISHED POINTS DEPENDING ON THE WORK ITEM.
3. ONE OR MORE DEFINED STATES THAT THE WORK ITEMS FLOW THROUGH FROM STARTED TO FINISHED. ANY WORK ITEMS BETWEEN A STARTED POINT AND A FINISHED POINT ARE CONSIDERED *WORK IN PROGRESS (WIP).*
4. A DEFINITION OF HOW WIP WILL BE CONTROLLED FROM STARTED TO FINISHED.
5. EXPLICIT POLICIES ABOUT HOW WORK ITEMS CAN FLOW THROUGH EACH STATE FROM STARTED TO FINISHED.
6. A *SERVICE LEVEL EXPECTATION (SLE),* WHICH IS A FORECAST OF HOW LONG IT SHOULD TAKE A WORK ITEM TO FLOW FROM STARTED TO FINISHED.

ACTIVELY MANAGING ITEMS IN A WORKFLOW

ACTIVE MANAGEMENT OF ITEMS IN A WORKFLOW CAN TAKE SEVERAL FORMS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- CONTROLLING WIP: A SIDE EFFECT OF CONTROLLING WIP IS A PULL SYSTEM. KANBAN SYSTEM MEMBERS START WORK ON AN ITEM (*PULLS* OR *SELECTS*) ONLY WHEN THERE IS A CLEAR SIGNAL THAT THERE IS CAPACITY TO DO SO.
- AVOIDING WORK ITEMS PILING UP IN ANY PART OF THE WORKFLOW.
- ENSURING WORK ITEMS DO NOT AGE UNNECESSARILY, USING THE SLE AS A REFERENCE. THE SLE IS A FORECAST OF HOW LONG IT SHOULD TAKE A SINGLE WORK ITEM TO FLOW FROM STARTED TO FINISHED.
- UNBLOCKING BLOCKED WORK.

IMPROVING A WORKFLOW

HAVING MADE THE DOW EXPLICIT, THE KANBAN SYSTEM MEMBERS' RESPONSIBILITY IS TO CONTINUOUSLY IMPROVE THEIR WORKFLOW TO ACHIEVE A BETTER BALANCE OF EFFECTIVENESS, EFFICIENCY, AND PREDICTABILITY.

- IT IS COMMON PRACTICE TO REVIEW THE DOW FROM TIME TO TIME TO DISCUSS AND IMPLEMENT ANY CHANGES NEEDED.
- THERE IS NO REQUIREMENT, HOWEVER, TO WAIT FOR A FORMAL MEETING AT A REGULAR CADENCE TO MAKE THESE CHANGES.
- KANBAN SYSTEM MEMBERS CAN AND SHOULD MAKE JUST-IN-TIME ALTERATIONS AS THE CONTEXT PICTURES.
- IMPROVEMENTS CAN BE EVOLUTIONARY OR REVOLUTIONARY BASED ON THE CONTEXT

THESE KANBAN PRACTICES ARE COLLECTIVELY CALLED A *KANBAN SYSTEM.*

THOSE WHO PARTICIPATE IN THE VALUE DELIVERY OF A KANBAN SYSTEM ARE CALLED *KANBAN SYSTEM MEMBERS.*

BE EXCELLENT TO EACH OTHER
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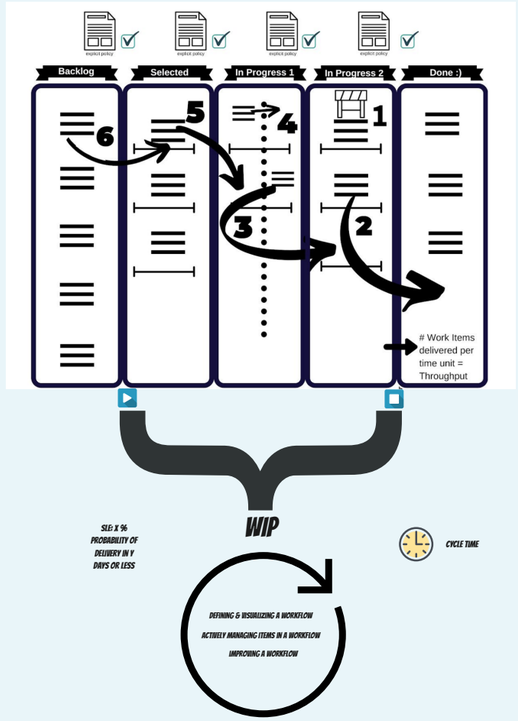
WHY USE KANBAN

CENTRAL TO THE DEFINITION OF KANBAN IS THE CONCEPT OF FLOW. FLOW IS THE MOVEMENT OF POTENTIAL VALUE THROUGH A SYSTEM. AS MOST WORKFLOWS EXIST TO OPTIMIZE VALUE, THE STRATEGY OF KANBAN IS TO OPTIMIZE VALUE BY OPTIMIZING FLOW.

SURRENDER to the FLOW

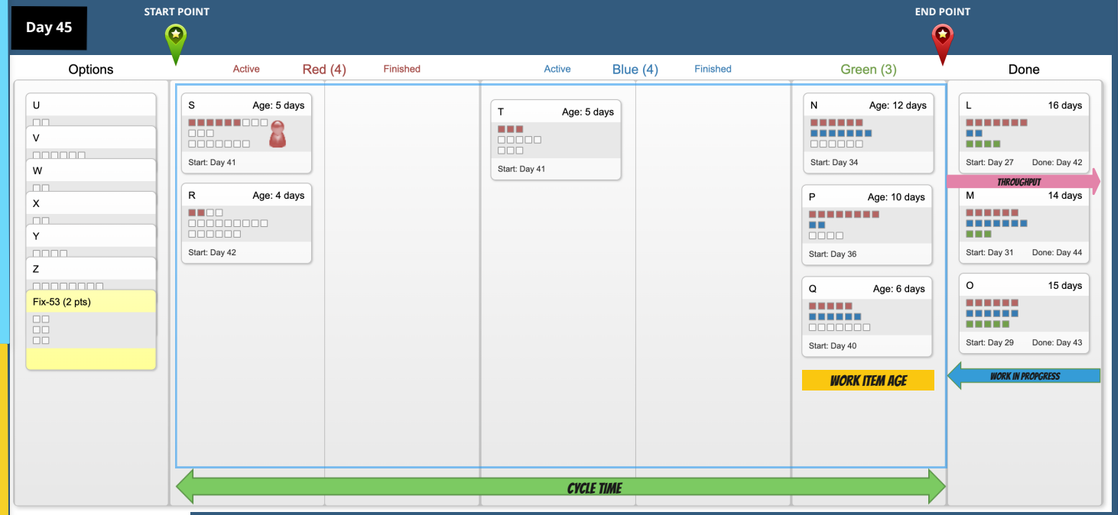


INTRODUCTION TO FLOW MEASURES

WIP: The number of work items started but not finished.

Work Item Age: The amount of elapsed time between when a work item started and the current time.

EXAMPLE KANBAN BOARD



LEANability
ActionableAgile™

Throughput: The number of work items finished per unit of time. Note the measurement of throughput is the exact count of work items.

Cycle Time: The amount of elapsed time between when a work item started and when a work item finished.