

KANBAN for SMBs

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Kanban is a strategy for
optimizing the flow of value
through a process that uses a
visual, pull-based system

Optimize Value by **Optimizing** Flow



Effective



Efficient



Predictable

Increased Effectiveness

An effective workflow is one that delivers what customers want when they want it



Enhanced Efficiency

An efficient workflow allocates available economic resources as optimally as possible to deliver value



Improved Predictability

A predictable workflow means being able to accurately forecast value delivery within an acceptable degree of uncertainty



Simple Practices

1. Defining and Visualizing the Workflow

A definition of how value moves through the process from start to finish, including policies, WIP and SLE

2. Actively Managing Items in the Workflow

A way to control WIP, avoid work piling up, remove blockers and ensure work items do not age unnecessarily using the SLE as a reference

3. Continuously Improving the Workflow

Making improvements to the Definition of Workflow to improve the balance of effectiveness, efficiency, and predictability based on flow metrics

Definition of Workflow

1. Units of Value

A definition of the individual units of value that are moving through the workflow. These units of value are referred to as *work items (or items)*.

2. Start and Finish Points

A definition for when work items are *started* and *finished* within the workflow. Your workflow may have more than one started or finished points depending on the work item.

3. Workflow Stages

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. Workflow Policies

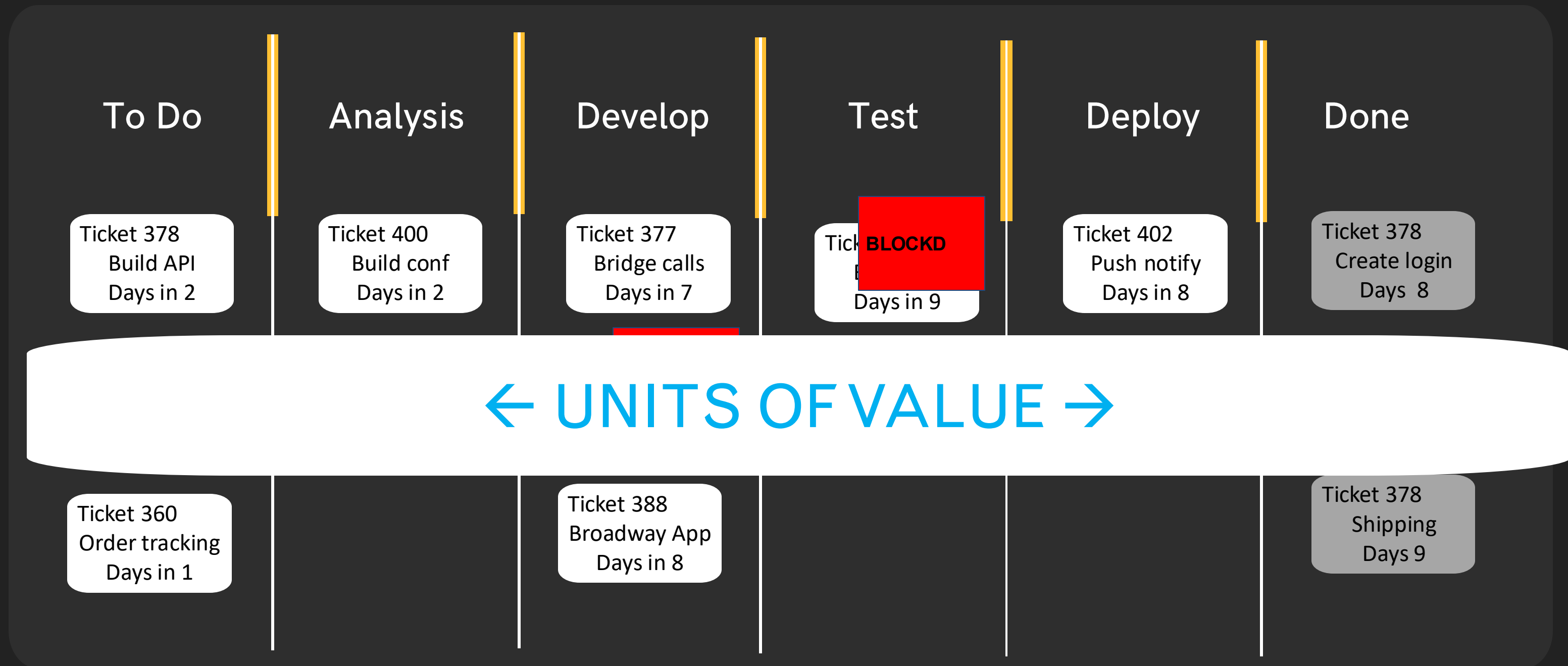
Explicit policies about how work items can flow through each state from started to finished.

5. WIP Control

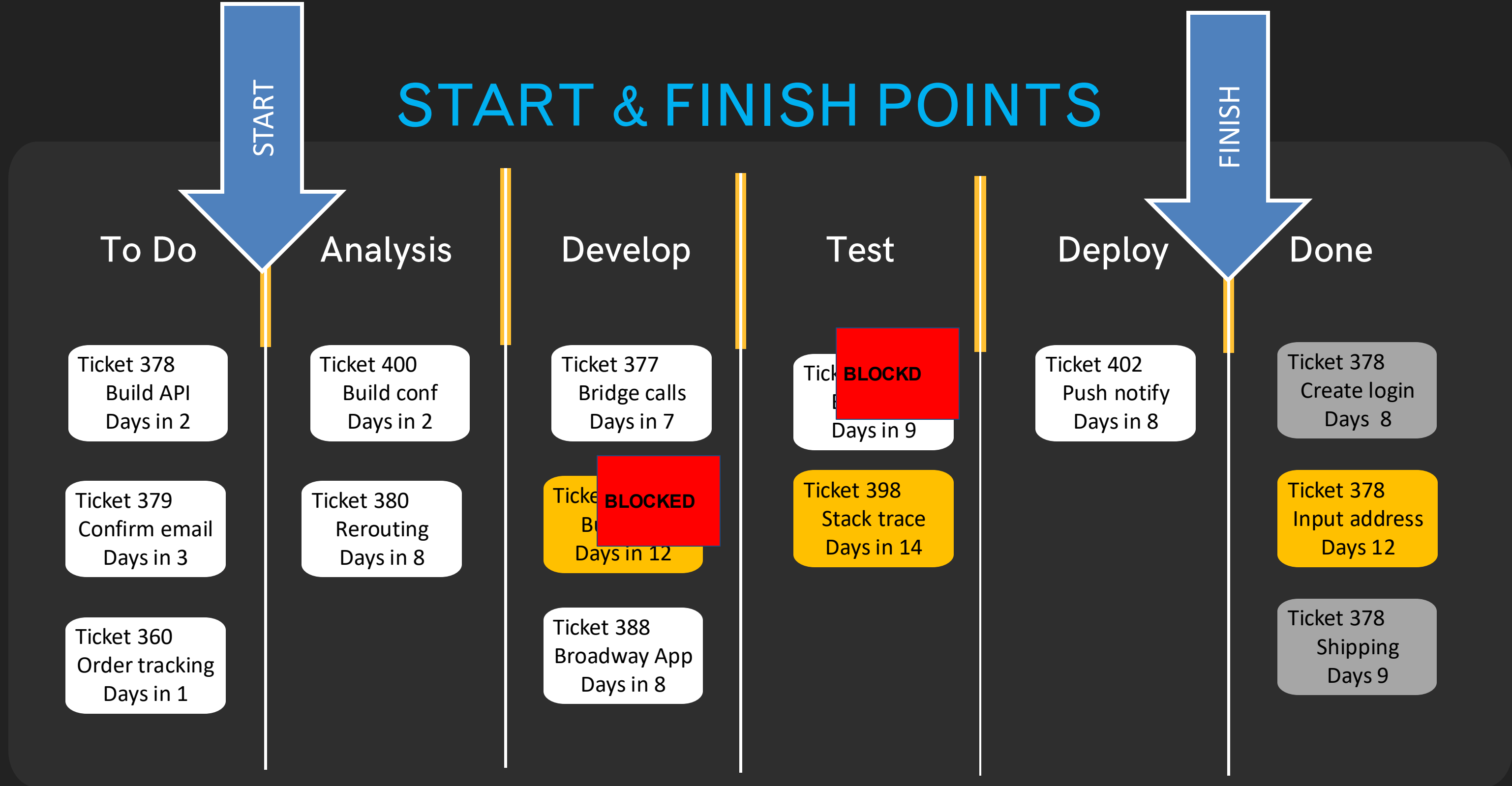
A definition of how WIP will be controlled from started to finished.

6. Service Level Expectation

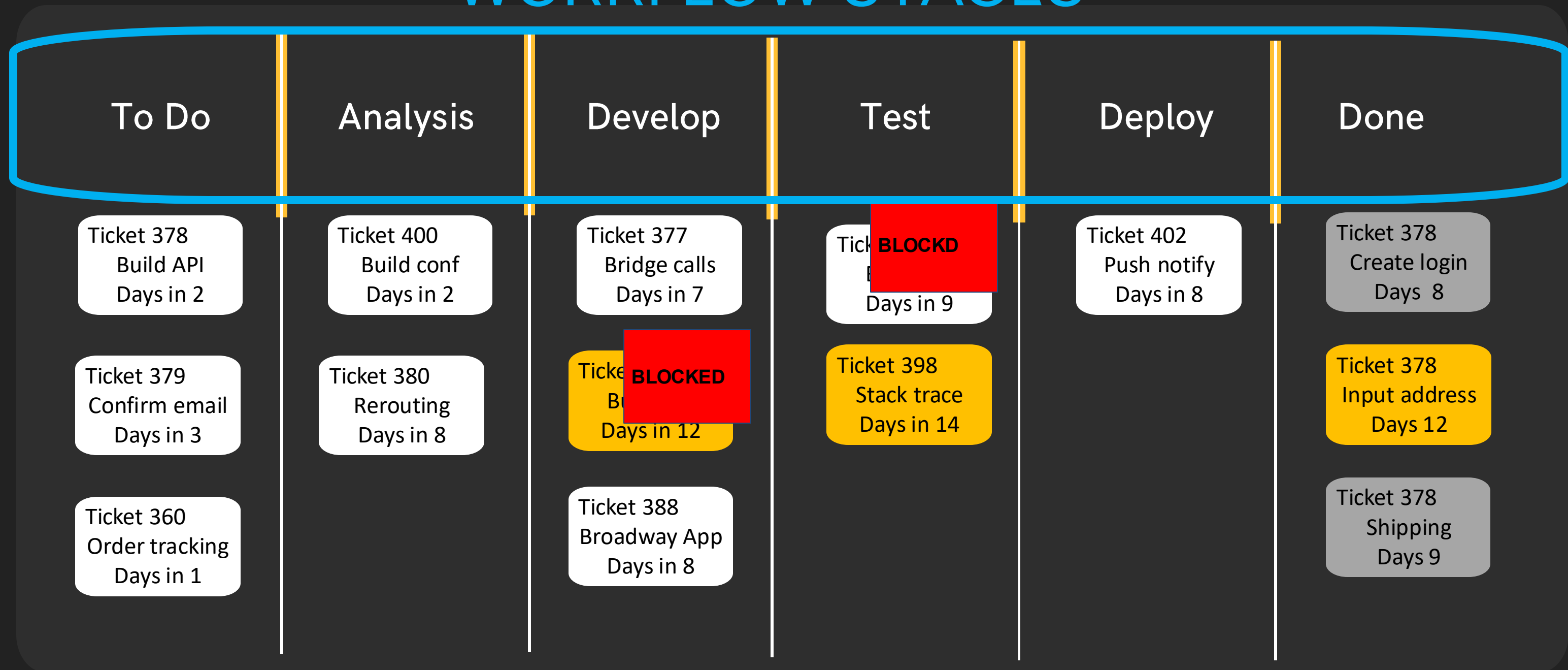
A *service level expectation (SLE)*, which is a forecast of how long it should take a work item to flow from started to finished.



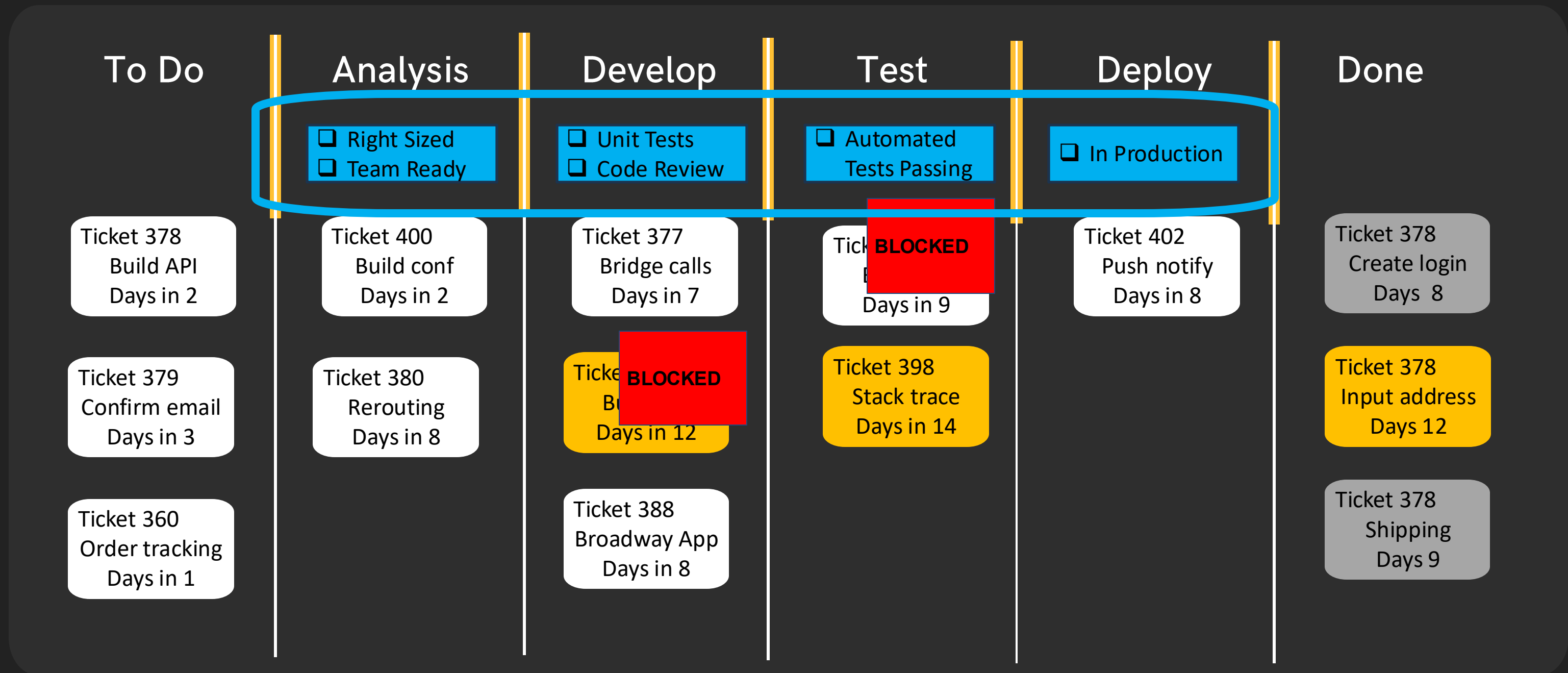
START & FINISH POINTS



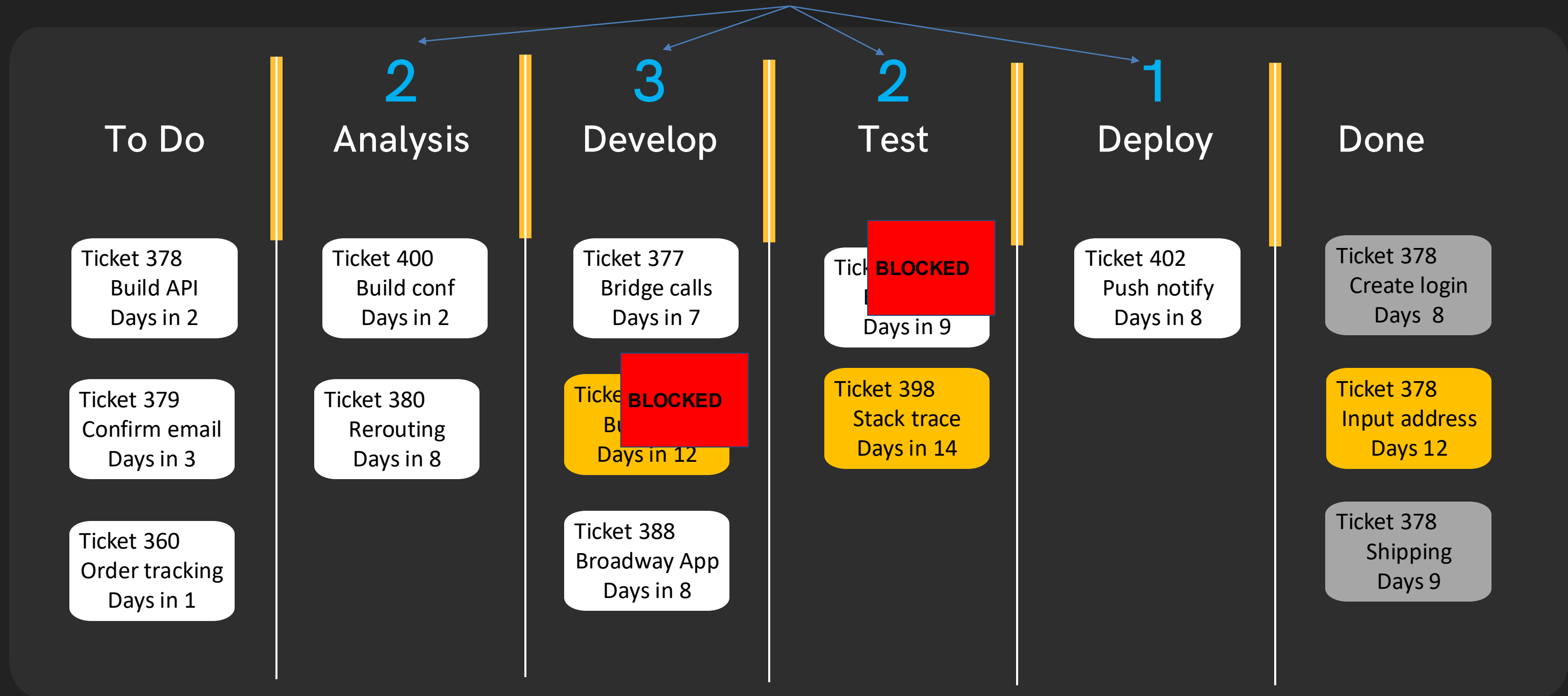
WORKFLOW STAGES



WORKFLOW POLICIES

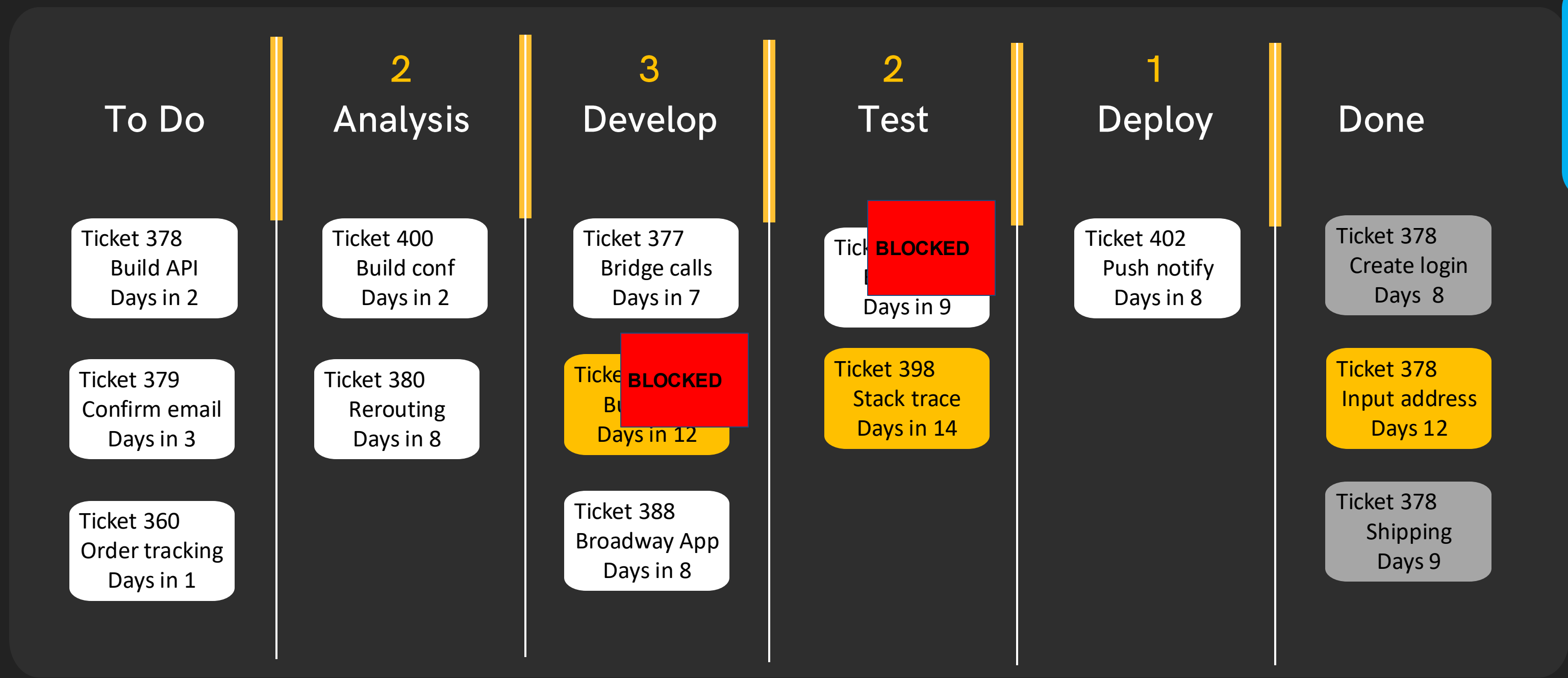


WIP CONTROL

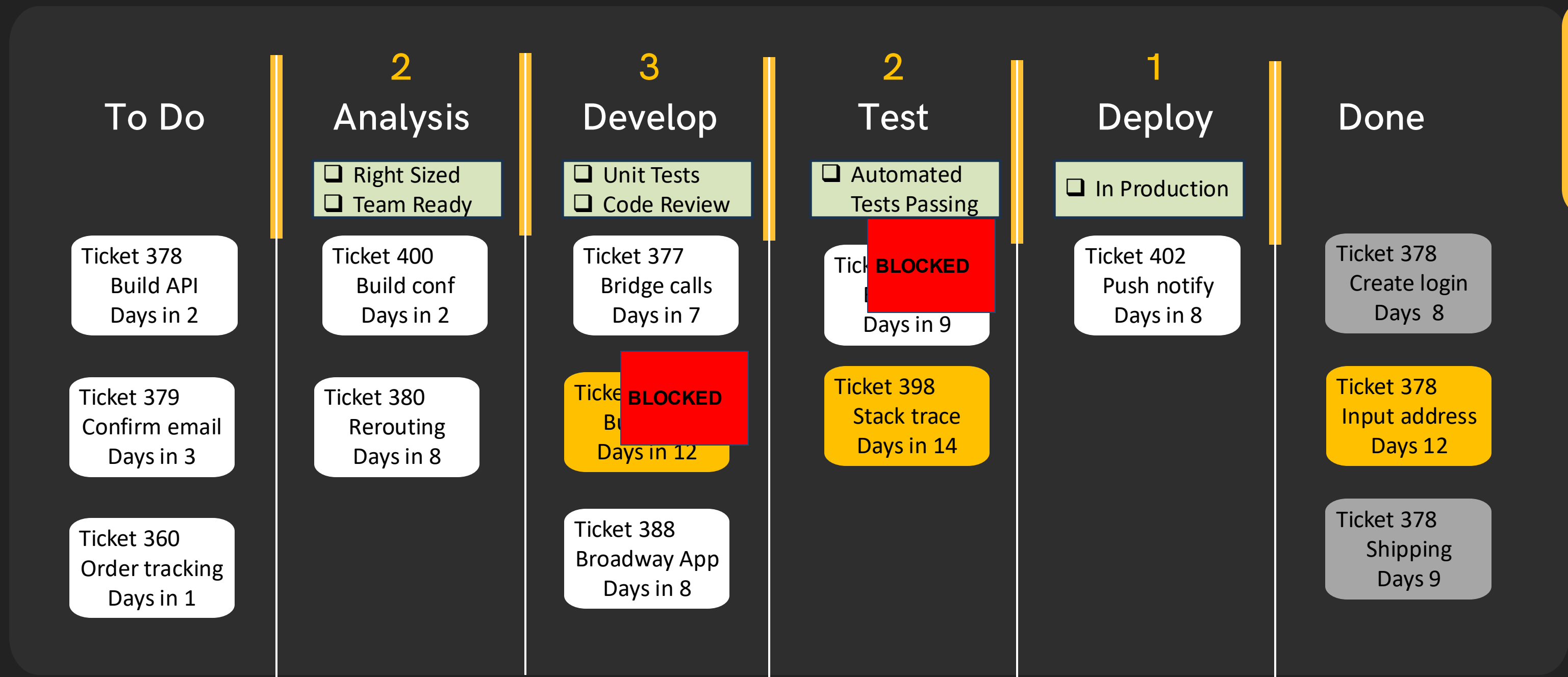


SERVICE LEVEL EXPECTATION

SLE: 85%
in 10
days or
less



Definition of Workflow



SLE: 85%
in 10
days or
less

Game Time

1. We are going to play The WIP Game (TWiG)!
2. Your goal is to get as many things to done as possible
3. Set your WIP limits to 4, 6, 4
4. Edit all settings to ON
5. Do not change your WIP when prompted
6. Take Screen Shots of Your Scatterplot, CFD, and Work Item Age

Flow Metrics



Throughput

The number of work items finished per unit of time.



Work In Progress

The total amount of work started by not yet finished.



Work Item Age

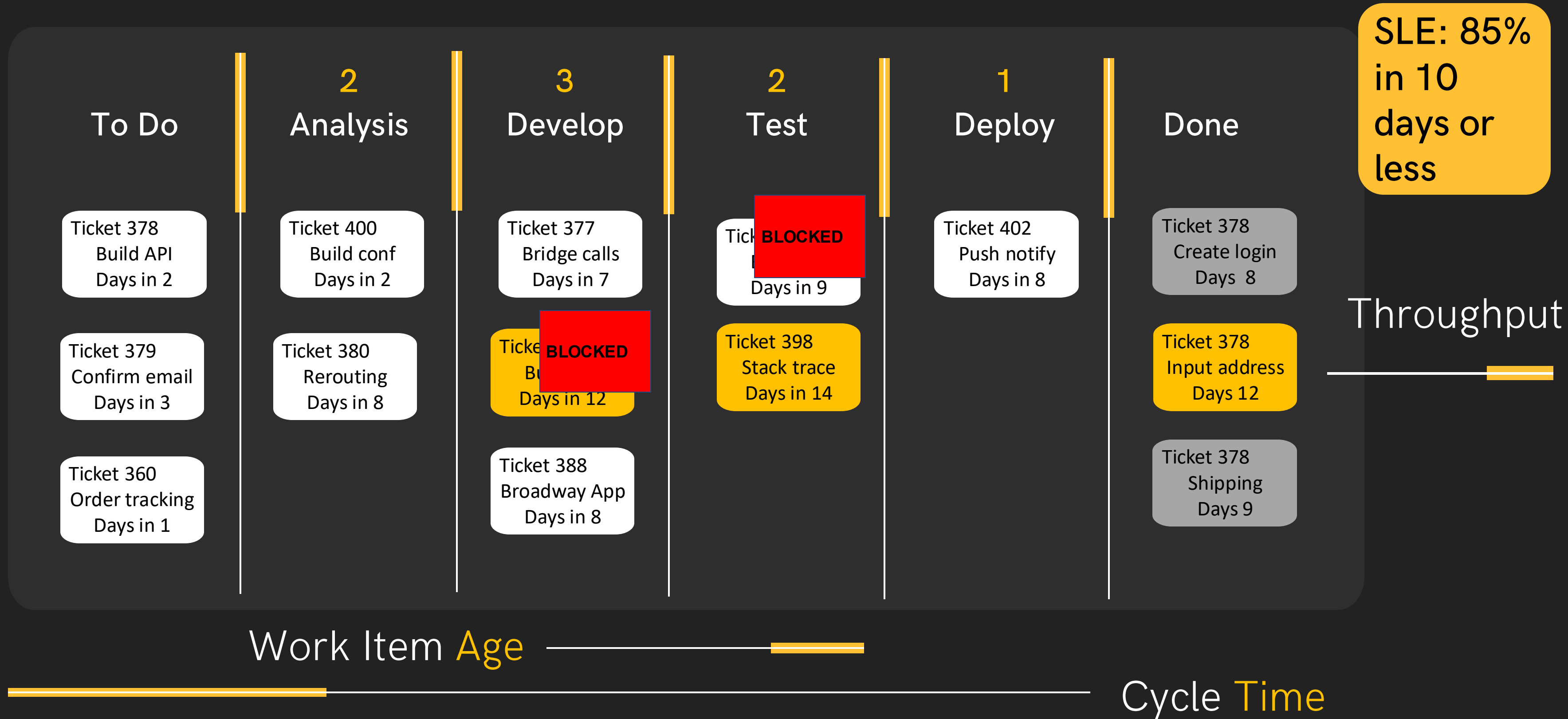
The amount of elapsed time between when a work item started and the current time.



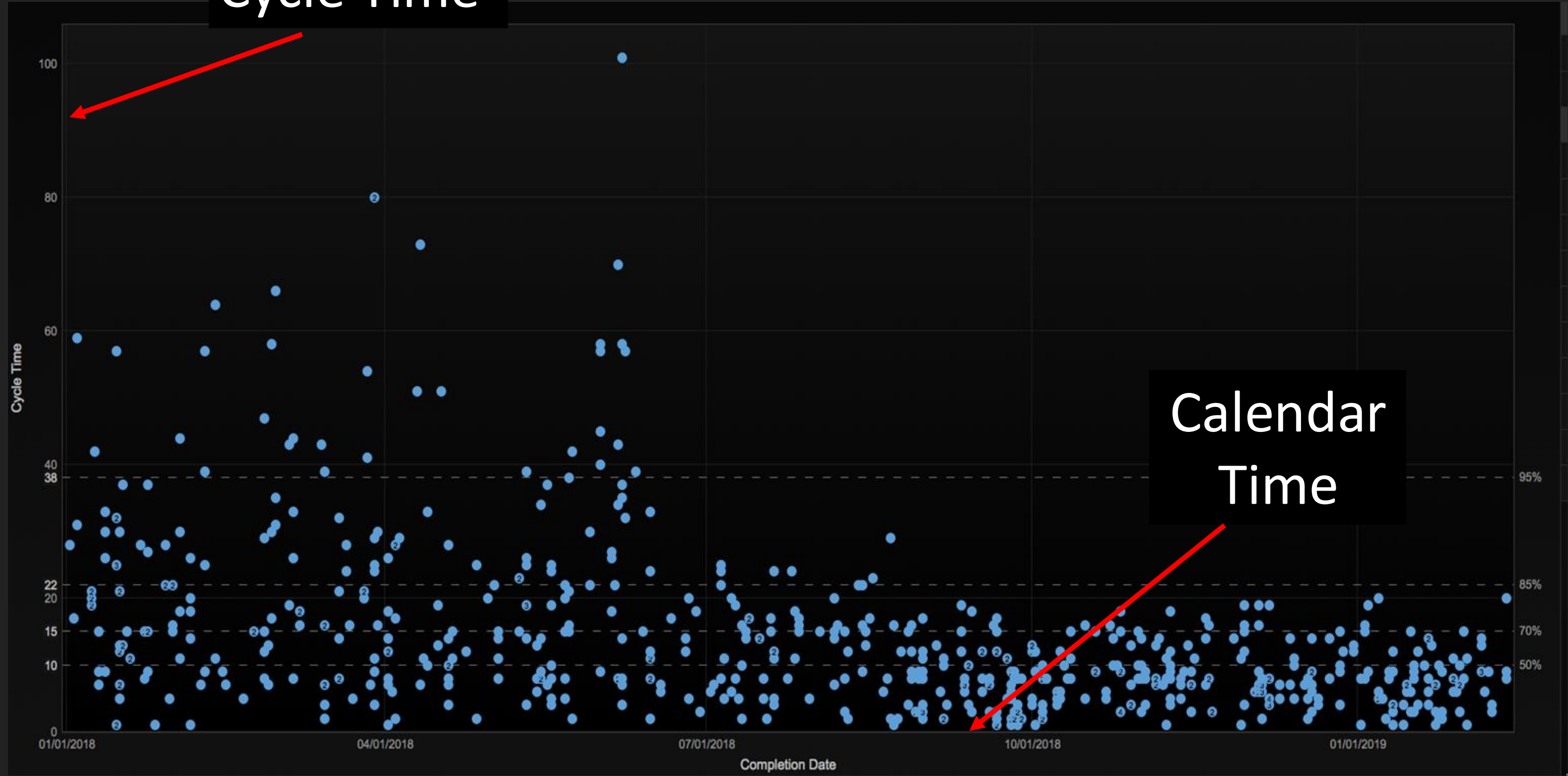
Cycle Time

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

Work In Progress

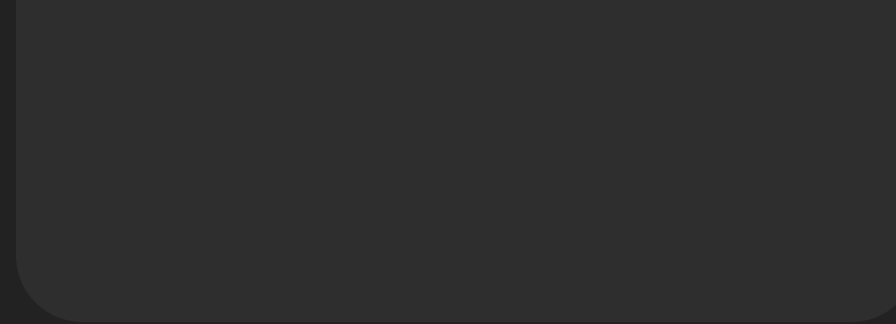


Cycle Time



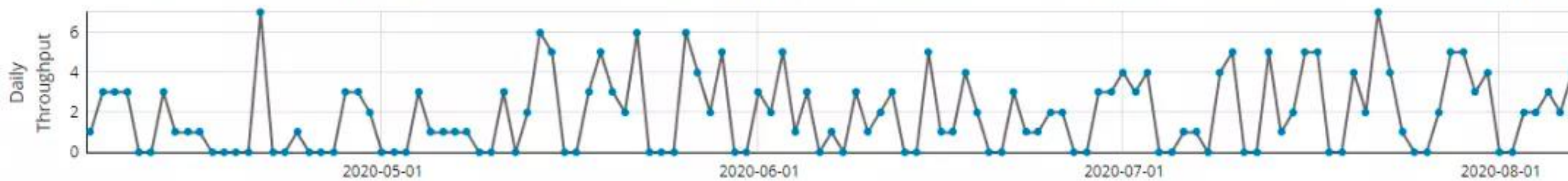
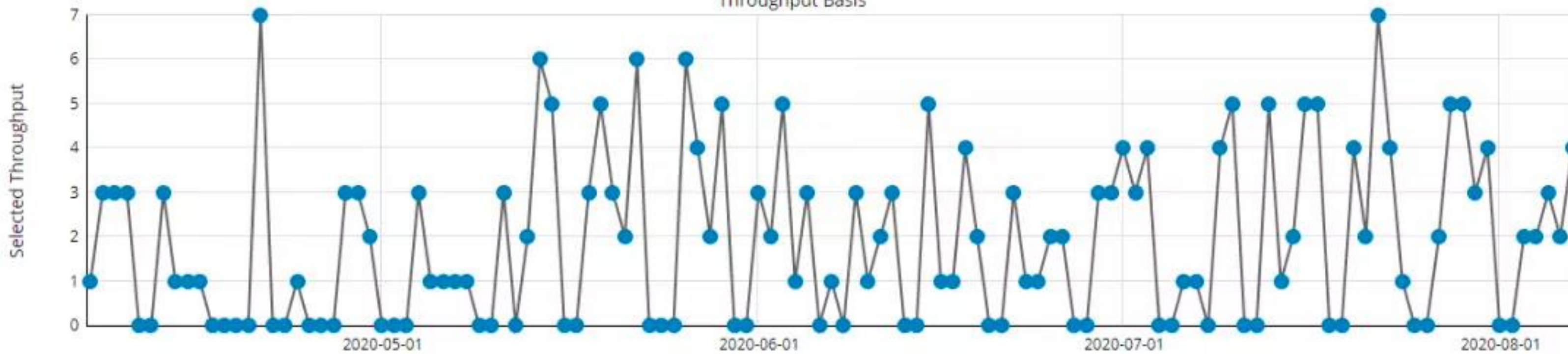
Modeling in Monte Carlo Simulations

Historical throughput data can be used to determine **when** multiple items will be complete OR **how many** items can be delivered by a fixed date



Monte Carlo: How Many

Throughput Basis



Monte Carlo (10K Trials)



Probabilistic instead of Deterministic



Includes Range and Probability

There will never be one exact result so our forecast needs to reflect more than one possible outcome.

Update with New Info

Forecasts need to be updated continuously as new data about pace, scope, or risk comes in.

Shorter is More Accurate

We will always be more accurate in smaller batches of time or of scope.



Stability Enables Predictability

Consistent Work in Progress (WIP)

Balancing the amount of work against the team's optimal operating capacity rather than the number of people on the team.



Continuously **reforecast** as new data comes in.

Changes in scope, capacity, or speed may change the forecast.



MonteCarlo

Team	Release	Code Freeze Date ▲	Stories Remaining	85% Completion Date	Completion Likelihood	Features Remaining
Hiring Integration	January 2017	01/10/2017	12	01/25/2017	37.42%	3
Identity Management	January 2017	01/31/2017	5	05/12/2017	24.56%	2
Compliance	January 2017	01/31/2017	1	01/10/2017	99.99%	0
Recruiting	January 2017	01/31/2017	35	01/03/2017	99.99%	5
Foundation Services	January 2017	01/31/2017	4	01/03/2017	99.90%	1
Onboarding	January 2017	01/31/2017	8	02/22/2017	28.46%	0
UltiPro TouchBase	January 2017	01/31/2017	27	01/17/2017	99.94%	5
Integration Services	January 2017	01/31/2017	5	02/03/2017	80.58%	0
People Domain	January 2017	01/31/2017	17	12/21/2016	99.99%	2
Bulk Data Export Services	February 2017	02/28/2017	47	03/24/2017	25.06%	8
Data Warehouse	February 2017	02/28/2017	5	12/21/2016	99.99%	0
Business Intelligence	February 2017	02/28/2017	12	01/17/2017	99.99%	4
Identity Management	V12.2.1 (R1 - Spring 2017)	03/15/2017	10	12/21/2017	0.74%	0
Foundation Services	V12.2.1 (R1 - Spring 2017)	03/15/2017	63	09/12/2017	0.01%	4
Hiring Integration	V12.2.1 (R1 - Spring 2017)	03/15/2017	6	02/08/2017	99.90%	0
UTM	V12.2.1 (R1 - Spring 2017)	03/15/2017	2	12/08/2016	99.99%	6
Payroll	V12.2.1 (R1 - Spring 2017)	03/15/2017	18	12/28/2016	99.99%	3
Talent Management	V12.2.1 (R1 - Spring 2017)	03/15/2017	57	02/17/2017	99.82%	6
UTA	V12.2.1 (R1 - Spring 2017)	03/15/2017	1	04/20/2017	48.62%	1
Compliance	V12.2.1 (R1 - Spring 2017)	03/15/2017	170	03/02/2017	98.30%	45
People Domain	V12.2.1 (R1 - Spring 2017)	03/15/2017	69	02/06/2017	99.99%	13
Tax Management Platform	TM-Beta	04/01/2017	111	11/15/2017	0.01%	25
Tax Management Integration	TM-Beta	04/01/2017	96	10/19/2017	0.01%	22
Tax Management	TM-Beta	04/01/2017	22	03/15/2017	96.96%	17
Identity Management	V12.1.2 (R2 - Fall/YE 2016)	09/29/2016	1	N/A	0.00%	0
SPS	SPS-CR	09/30/2017	40	02/13/2017	99.99%	8

56%

likelihood that we will deliver
between August 1-4

Does the new probability
that we will hit this date
reflect a risk level that
we care comfortable
with?

Scaling Kanban



Team Kanban

Establish a continuous, predictable flow of work to done

Program Kanban

Connect work and dependencies that span across a team-of-teams

Portfolio Kanban

Create visibility of initiative, investments, and alignment to strategic objectives

Building a Learning Community

A dynamic and inclusive environment that encompasses individuals from various backgrounds, cultures, experiences, and perspectives



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