

Executing Projects Kanban Way

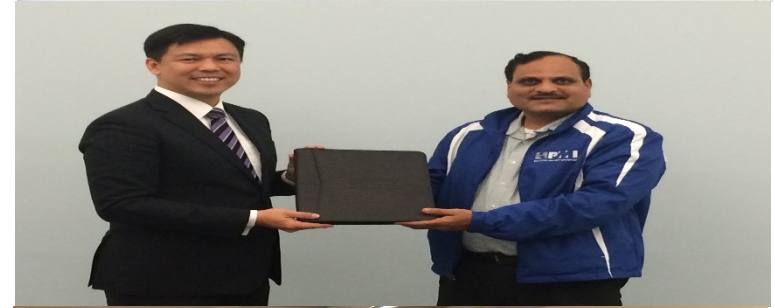
“When you change the way, you look
at things, the things you look at
change”
- Wayne Dyer

Aug 27, 2021



Who is Bhanu?

- Technical
 - Guided missile program scientist for Indian Defense
 - Technical Staff Officer to the CIO
 - Application developer, architect & lead
 - Team member for security governance / audit
 - Data Analytics and Business Intelligence
- Managerial
 - Program Manager
 - PMO Manager
- Professional
 - Member ISSA
 - Member PMI, PMISV
 - Member Scrum Alliance
 - Certification: PMP, PMI-ACP, PMI-RMP, DASSM, SAFe-SPC, TOGAF, CCSK
 - DevOps PM, Architect, RM, Trainer, Coach
- Giving Back
 - Mentor and coach for project managers
 - Past President PMI Silicon Valley Chapter
 - Guest speaker at SJSU
 - Adjunct Professor at GGU SF, University of Silicon Valley



Takeaways

- Understand basic Kanban
- Steps in implementing successful Kanban framework
- Difference between Scrum and Kanban

What is Kanban

- Kanban (n): a strategy for optimizing the flow of stakeholder value through a process that uses a visual, work-in-progress limited pull system with available capacity
- Central to the definition of Kanban is the concept of "flow."
- kanban means a visual (kan) card (ban)
- Kanban cards move from left to right

What is Kanban

- Kanban development methodology aims to improve the operations of a workflow by removing system-level bottlenecks of the workflow
- Push - the supply center keeps on producing and delivering parts
- Pull - the supply center produces and delivers parts based on requests
- Kanban is evolutionary change method (Visualize workflow, WIP)
- Kanban is workflow (signal)

What is Kanban

A Kanban Board could visualize:

- Various Types of Kanban Cards (features, user stories, defects)
- Extra columns identifying workflow phases
- Explicit policies (regulations about how to use the Kanban board, and definition of done of phases)
- Swim lanes (rows across multiple columns to group user stories by features or defects by products and components)

What is Kanban

| Pool of Ideas | Feature Preparation | | Feature Selected | User Story Identified | User Story Preparation | | User Story Development | | Feature Acceptance | | Deployment | Delivered |
|---------------|-------------------------------|----------|------------------|--|------------------------------|------------------------------|----------------------------------|------------------------------|--------------------------|----------|------------|-----------|
| Epic 431 | 3 - 10 In Progress Ready | | 2 - 5 | 30 | 15 In Progress Ready | | 15 In Progress Ready (Done) | | 8 In Progress Ready | | 5 | Epic 294 |
| Epic 478 | Epic 444 | Epic 662 | Epic 602 | | | Story 602-02 Story 602-05 | Story 602-06 Story 602-04 | Story 602-05 Story 602-01 | Epic 401 | Epic 609 | Epic 694 | Epic 386 |
| Epic 562 | Epic 589 | | Epic 302 | Story 302-03 Story 302-01 | Story 302-07 | Story 302-09 | Story 303-05 | Story 302-04 | Epic 468 | Epic 577 | Epic 276 | Epic 419 |
| Epic 439 | Epic 651 | | Epic 302 | Story 302-02 Story 302-06 | Story 302-08 | | | | Epic 362 | | Epic 339 | Epic 388 |
| Epic 329 | | | Epic 335 | Story 335-09 Story 335-10 Story 335-04 Story 335-08 Story 335-01 Story 335-03 | Story 335-05 Story 335-02 | Story 335-06 Story 335-07 | | | | | Epic 521 | Epic 287 |
| Epic 287 | | | Epic 512 | Story 512-04 Story 512-07 Story 512-02 Story 512-05 Story 512-06 Story 512-03 | Story 512-01 | | | | | | Epic 582 | Epic 274 |
| Epic 606 | Discarded | | | | | | | | | | | |
| | Epic 511 | Epic 213 | | | | | | | | | | |
| | Epic 221 | | | | | | | | | | | |

Policy
Business case showing value, cost of delay, size estimate and design outline.

Policy
Selection at Replenishment meeting chaired by Product Director.

Policy
Small, well-understood, testable, agreed with PD & Team

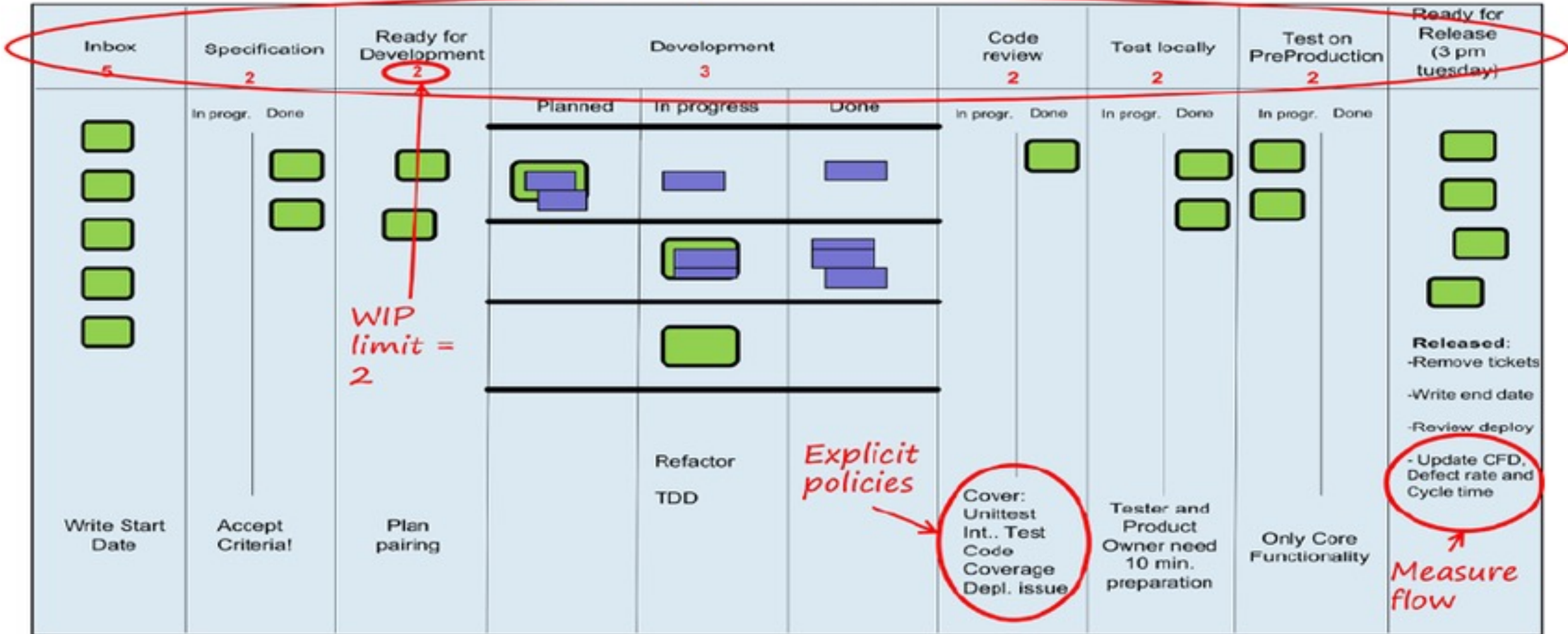
Policy
As per "Definition of Done" (see...)

Policy
Risk assessed per Continuous Deployment policy (see...)

*Please check reference for details

Kanban workflow on a Kanban board

Visualized workflow



*Please check reference for details

Kanban Practices

- Visualize workflow Kanban

Step 1: Identify the scope of your process you would like to visualize

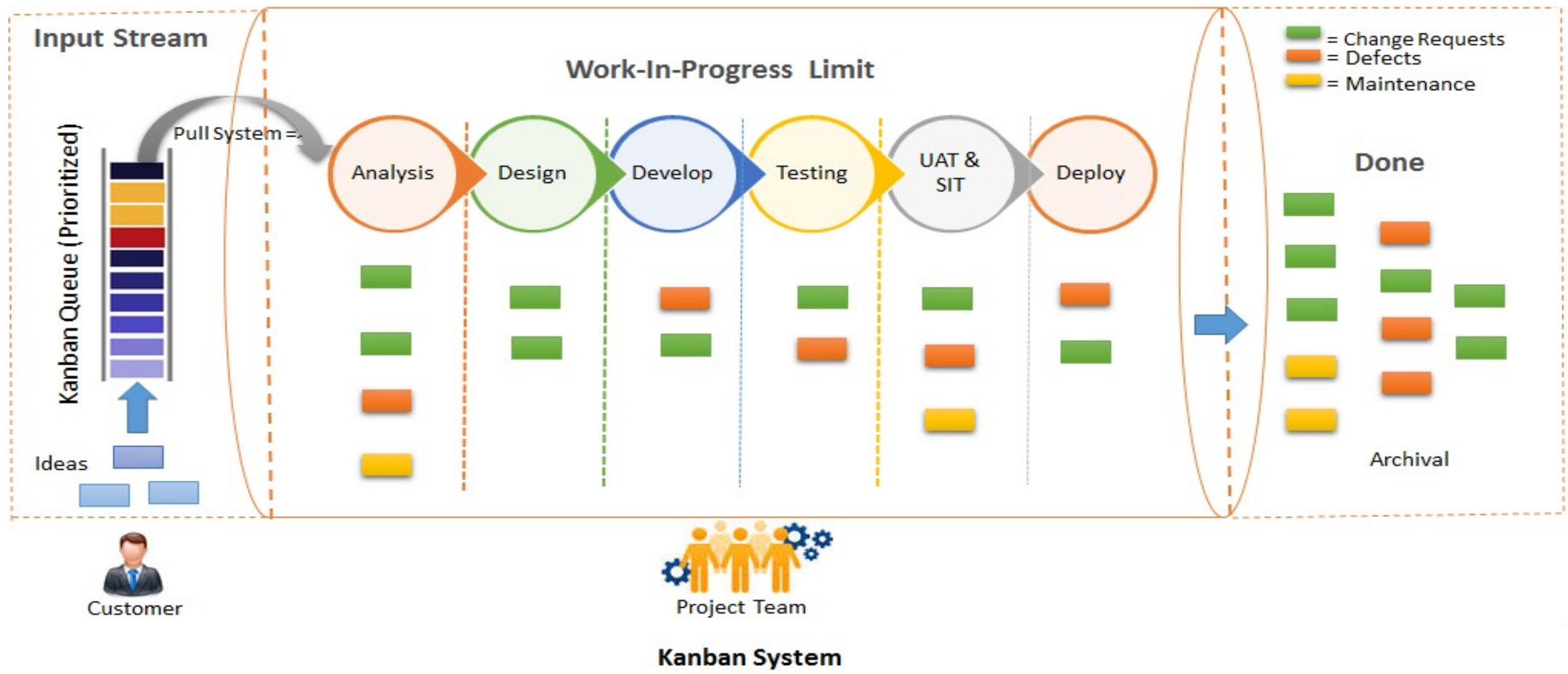
Step 2: List the steps that get into your process, which creates outcomes such as products and services

Step 3: Transform steps of your process into lanes of your Kanban board

Step 4: Get back to work, experiment with, visualize and improve your Kanban workflow

Kanban Practices

- Visualize workflow Kanban



¹⁰ *Please check reference for details

Kanban Metrics

- Team throughput
- Work In Progress (WIP)
- Lead Time
- Cycle Time
- Little's Law: $\text{Cycle Time} = \text{WIP} / \text{Throughput}$
- Work item age
- Impediments
- Feedback loop (Long, Short)

Kanban vs Scrum



Kanban

Scrum

| | |
|---|---|
| Uses “Lead Time” metric to measure, optimize, and improve the speed of delivery. | Uses “Velocity” metric to measure, optimize, and improve the speed of delivery. |
| No specifications about the size of work items. | Work items should be split into reasonable sizes, so they fit in Scrum iterations (Sprints). |
| Work In Progress (WIP) Limited for each step of the workflow. | Work In Progress (WIP) Limited for each Sprint. |
| New work items are welcomed as long as WIP limits of workflow steps allow. | No new work items are allowed once a Sprint is ongoing. |
| Specifies no roles. And yet, to be able to become knowledgeable and stay competitive in their industries, Kanban team members are trained as Kanban Experts or Kanban Project Managers. | Specifies 3 roles, including Scrum Master, Scrum Product Owner, and Scrum Team (Member). |
| Prioritization and grooming are optional. | Requires constant prioritization and grooming of the product backlog. |
| Iterations are based on events (such as releases) rather than time. | Iterations (Sprints) are time-boxed. |

Kanban vs Scrum

Kanban

Scrum

| | |
|--|--|
| Kanban board is persistent for a given project, product, or service. | Scrum Board (Sprint Backlog) is rebuilt for each Sprint. |
| Kanban teams commit to project goals, efficiency, and ultimate business outcomes. | Scrum Teams commit for Sprint goals. |
| Cross-functional teams, as well as expert teams, are allowed. | Requires cross-functional teams . |
| No charts are specified. | Requires burn-down charts . |
| Estimation is the duty of Certified Kanban Project Manager™ (Kanban-PMTM) . | Requires estimation from the Scrum team . |
| A Kanban board could be shared by multiple organizations or teams. | A Scrum Board (Sprint Backlog) belongs to one single Scrum team . |

How do you start Kanban

- Conduct Kanban workshop
- Address Stakeholders
- Begin with what you do now
- Target incremental change with Kanban
- Respect current roles and responsibilities
- Motivate acts of leadership with Kanban at all levels
- Never stop experimenting

Thank You



Let's get better today @Kanban...

Reference: Kanban framework Training Book by International Scrum Institute

Other free sources available on internet