

Unleashing the power of Scrum and Kanban together - Best of Both Worlds!!

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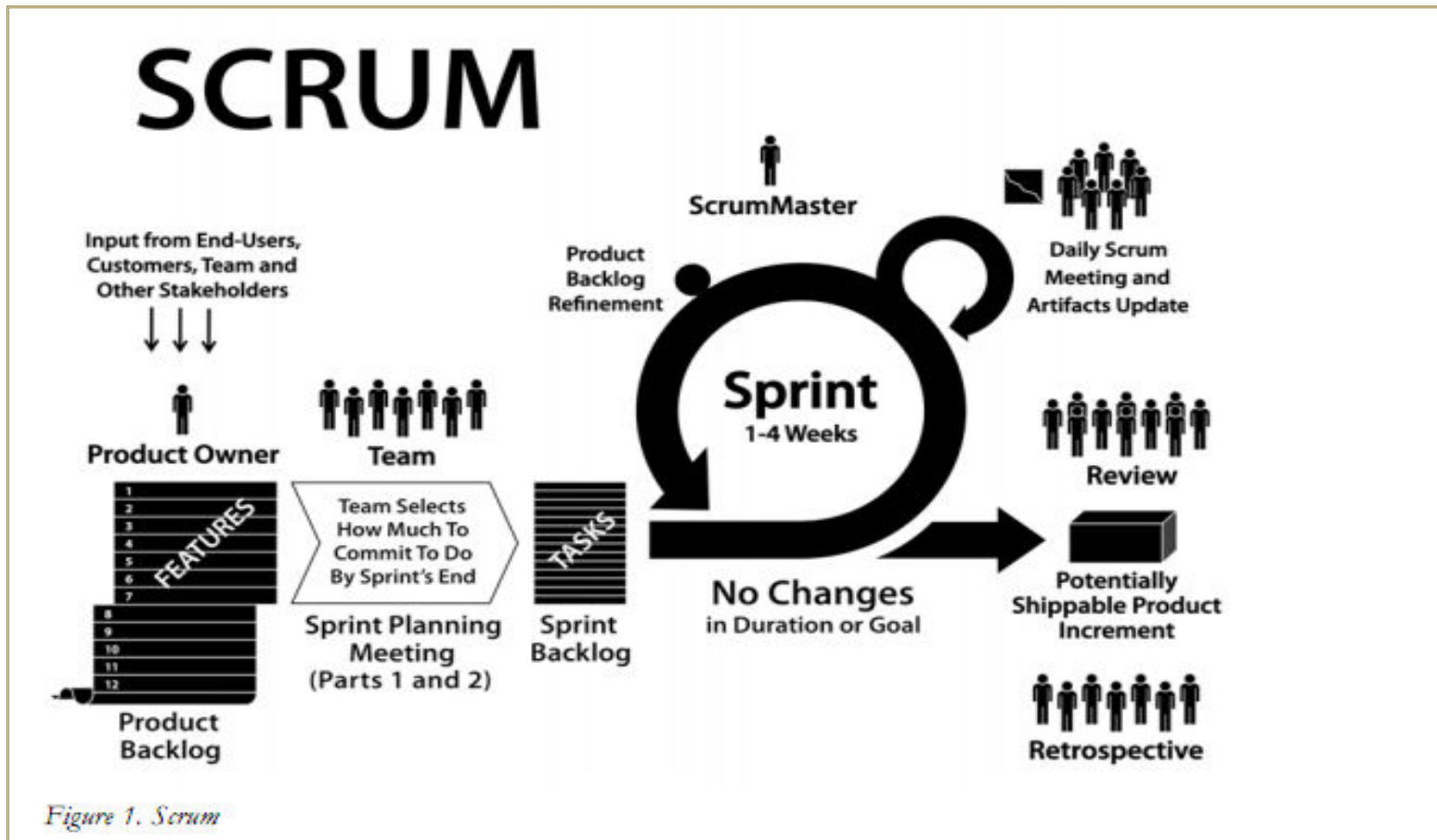
About Us

- Digite Inc, valley based product company, pioneer in Web-based Collaborative Products/ Solutions for Geographically Distributed Teams
- Over 75 customers/ 250,000 users in North America, Europe, Asia/ Pacific.
- Two products, Quarterly releases
- 30+ dev team size, 5-8 QA, 1 PO, distributed across three locations.

Agenda

- Why look beyond SCRUM?
- What is Kanban/ Scrumban?
- When to use it?
- Swift-Kanban Demo

Refresh SCRUM



Understanding context....

If you have been doing SCRUM, what
do you if in the middle of a
SPRINT.....

Understanding context....

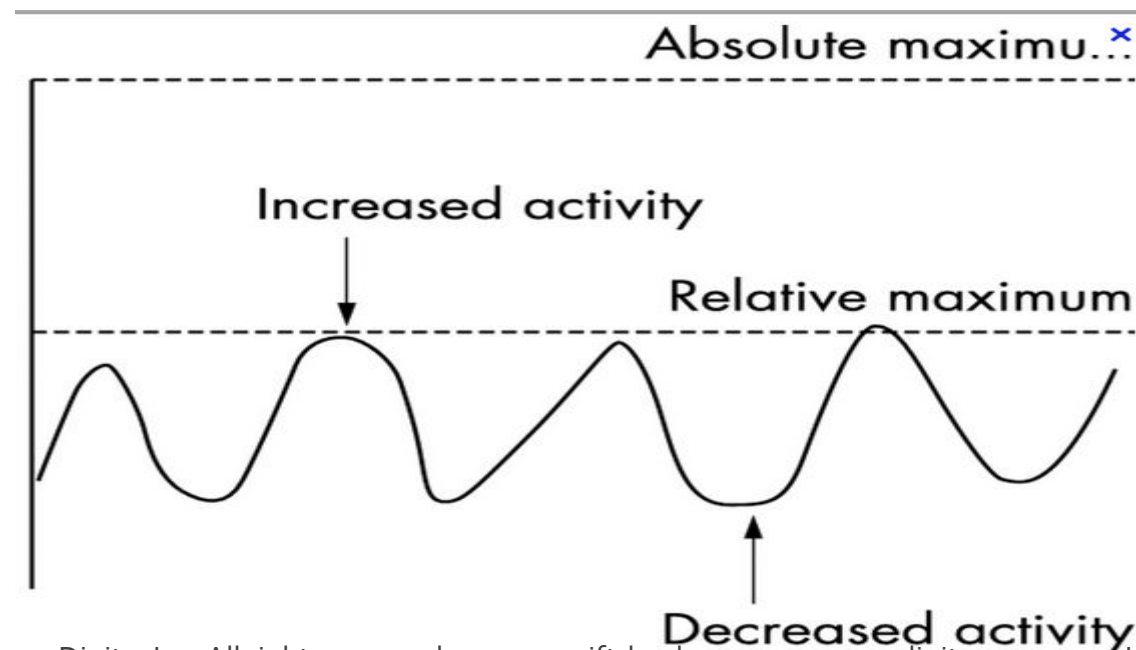
Customer pushes to include a HIGHLY
BUSINESS CRITICAL feature in the iteration
scope

Understanding context....

Production server crashes and requires
entire team to work for 2 days?

Understanding context....

Do you oscillate between over-commitment and undercommitment



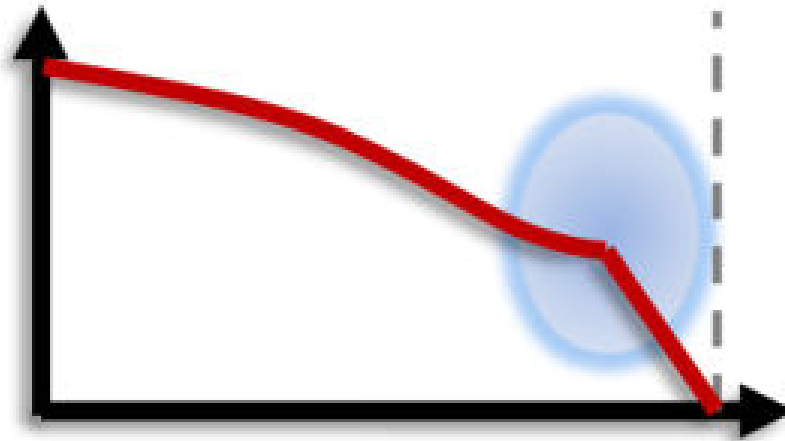
Understanding context....

What do you do to make sure that the SPRINT commitment is not missed?

Hint :- Does your team slog at the last mile or make safer commitments?

Understanding context....

Do you get a mini-death march burndown like this often?



Understanding context....

How do you improve your velocity? Do you over-estimate next sprint cards?

Understanding context....

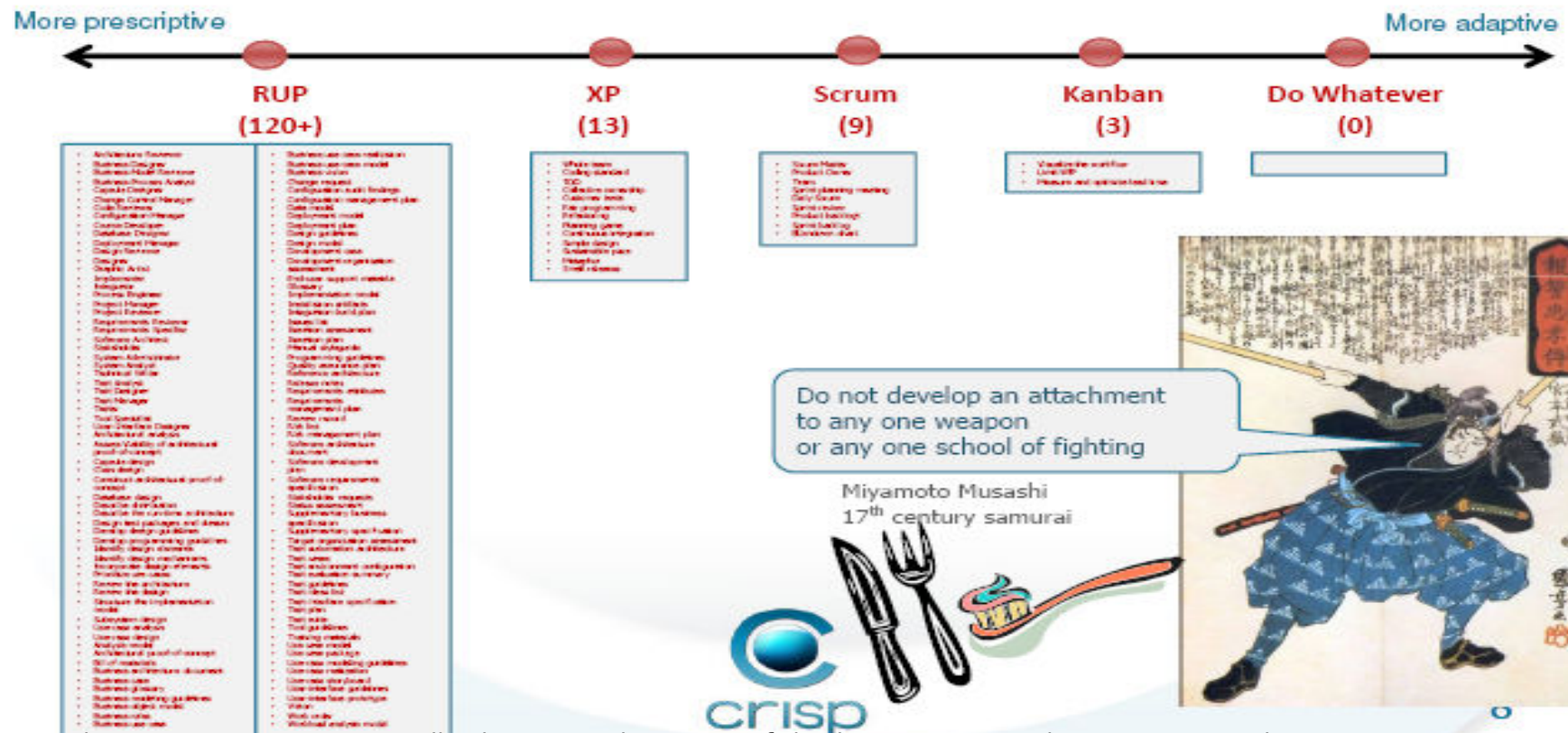
- Do you clearly know “what to build” and whether what you are building will be “loved” by the customers?
- Is there a point in preparing/ analysing too many stories for development to work on (waste) ?
- Do you end up in frequent re-planning or sprints?

Enter Kanban

- Derived from the combination of two Japanese words, kan ("visual") and ban ("card" or "board"), kanban roughly translates to sign board or signal board.

Kanban Introduction

Prescriptive vs adaptive



Kanban – Key Principles

- Visualize your Workflow
- Limit Work In-Process (WIP)
- Manage Flow
- Make Process Policies Explicit
- Improve Collaboratively(Using Models/ Scientific Methods)

How to transition?

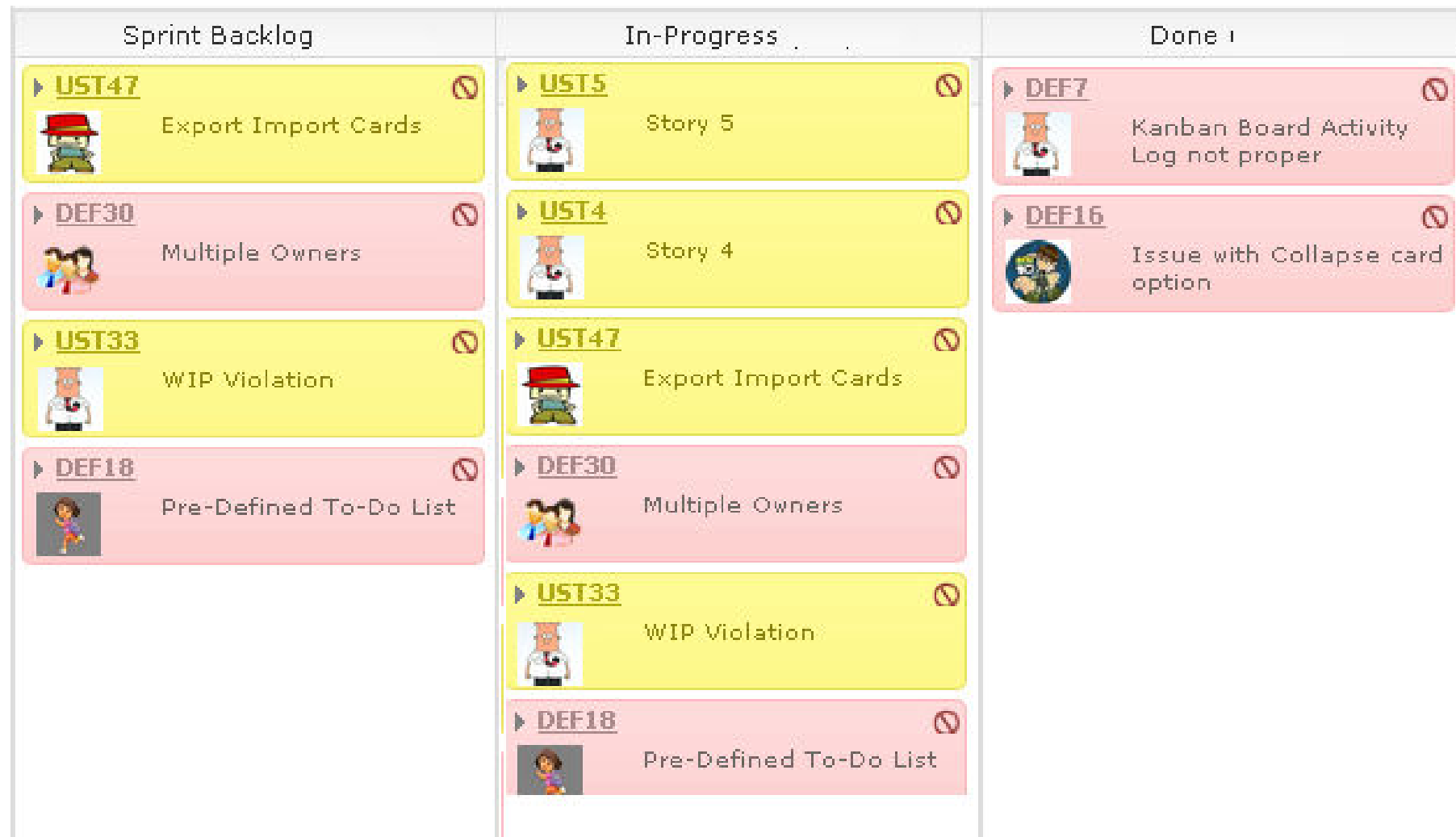
Kanban Approach

- Start with what you do now
- Pursue a Evolutionary change approach
- Retain current roles/ responsibilities

Visualize Workflow

- Visualizing workflow helps identify the problem areas/ bottlenecks.
- Gives a common picture of vision/ goals

Visualize workflow

























Scrum Board

One could argue this is already done using Agile boards, but at a glance can you see:

- ★ What you are working on?
- ★ If you are overloaded?
- ★ Where bottlenecks are?
- ★ Where gaps are forming?
- ★ What is blocked?



Limit Work-In-Process (WIP)

Sprint Backlog (0/5)	In-Progress (5/5)	Done (0/5)
<div>▶ <u>UST47</u>   Export Import Cards</div> <div>▶ <u>DEF30</u>   Multiple Owners</div> <div>▶ <u>UST33</u>   WIP Violation</div> <div>▶ <u>DEF18</u>   Pre-Defined To-Do List</div>	<div>Team Member 1 (2/2)</div> <div>▶ <u>UST5</u>   Story 5</div> <div>▶ <u>UST4</u>   Story 4</div> <div>Team Member 2 (3/2)</div> <div>▶ <u>UST3</u>   Story 3</div> <div>▶ <u>UST2</u>   Story 2</div> <div>▶ <u>UST1</u>   Story 1</div>	<div>▶ <u>DEF7</u>   Kanban Board Activity Log not proper</div> <div>▶ <u>DEF16</u>   Issue with Collapse card option</div>

One Simple rule..

STOP STARTING

START STOPPING

Why Limit WIP?

- Multi-tasking is no good and rather reduces productivity, than improve it.
- Reduces rework
- Lessens probability of min-death marches.

Queuing Theory : Little's law

*Total Cycle Time
= Number of things in process / Average
Completion Rate

Example:

1 week = 4 Items / 4 per week

Queuing Theory : Little's law

To improve Cycle Time

- Reduce Number of Things in Process
- Improve Average Completion Rate
- Reduce rework
- High visibility of blockers and active removal
- Analysis to identify items that are too large

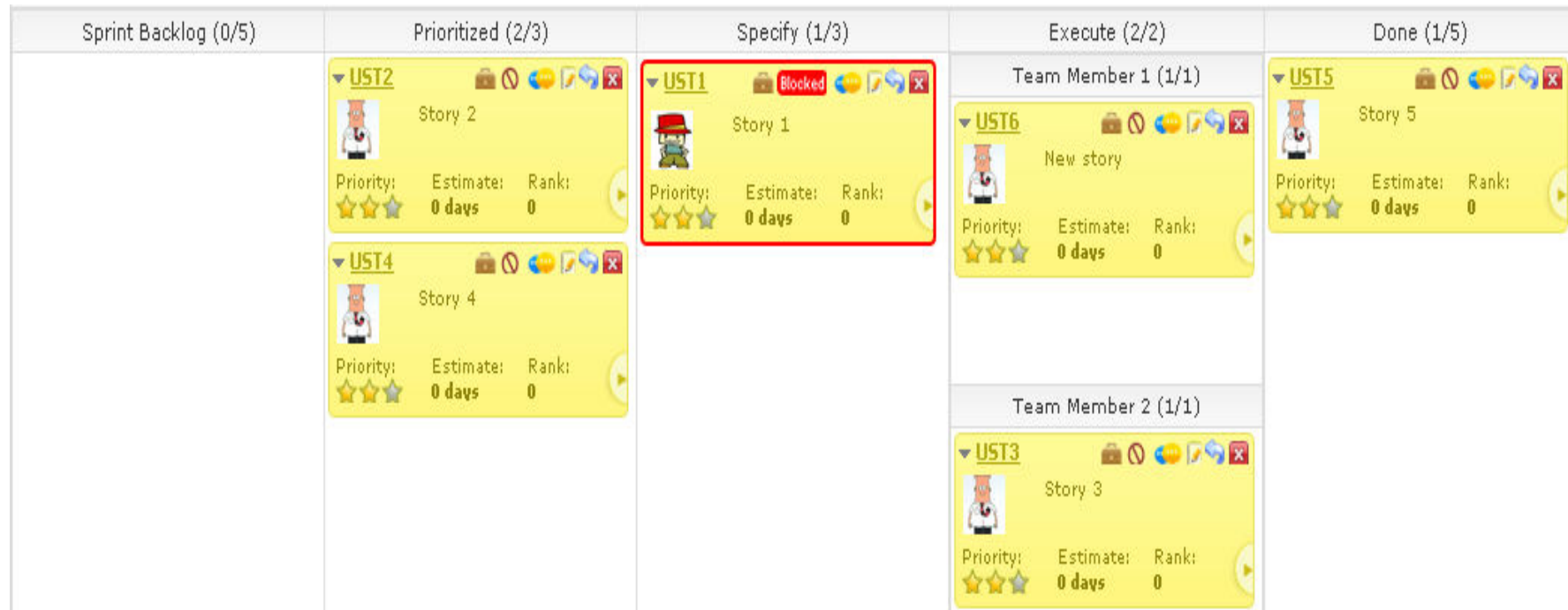
Manage Flow

Sprint Backlog (0/5)	Prioritized (3/3)	In-Progress (2/5)	Done (1/5)
<div> <div>UST47</div> <div>Export Import Cards</div> </div>	<div> <div>UST2</div> <div>Story 2</div> <div> <div>Priority:</div> <div>Estimate:</div> <div>Rank:</div> </div> <div> <div>☆☆☆</div> <div>0 days</div> <div>0</div> </div> </div>	<div>Team Member 1 (1/2)</div> <div> <div>UST6</div> <div>New story</div> <div> <div>Priority:</div> <div>Estimate:</div> <div>Rank:</div> </div> <div> <div>☆☆☆</div> <div>0 days</div> <div>0</div> </div> </div>	<div> <div>UST5</div> <div>Story 5</div> <div> <div>Priority:</div> <div>Estimate:</div> <div>Rank:</div> </div> <div> <div>☆☆☆</div> <div>0 days</div> <div>0</div> </div> </div>
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Just-in-time Stories

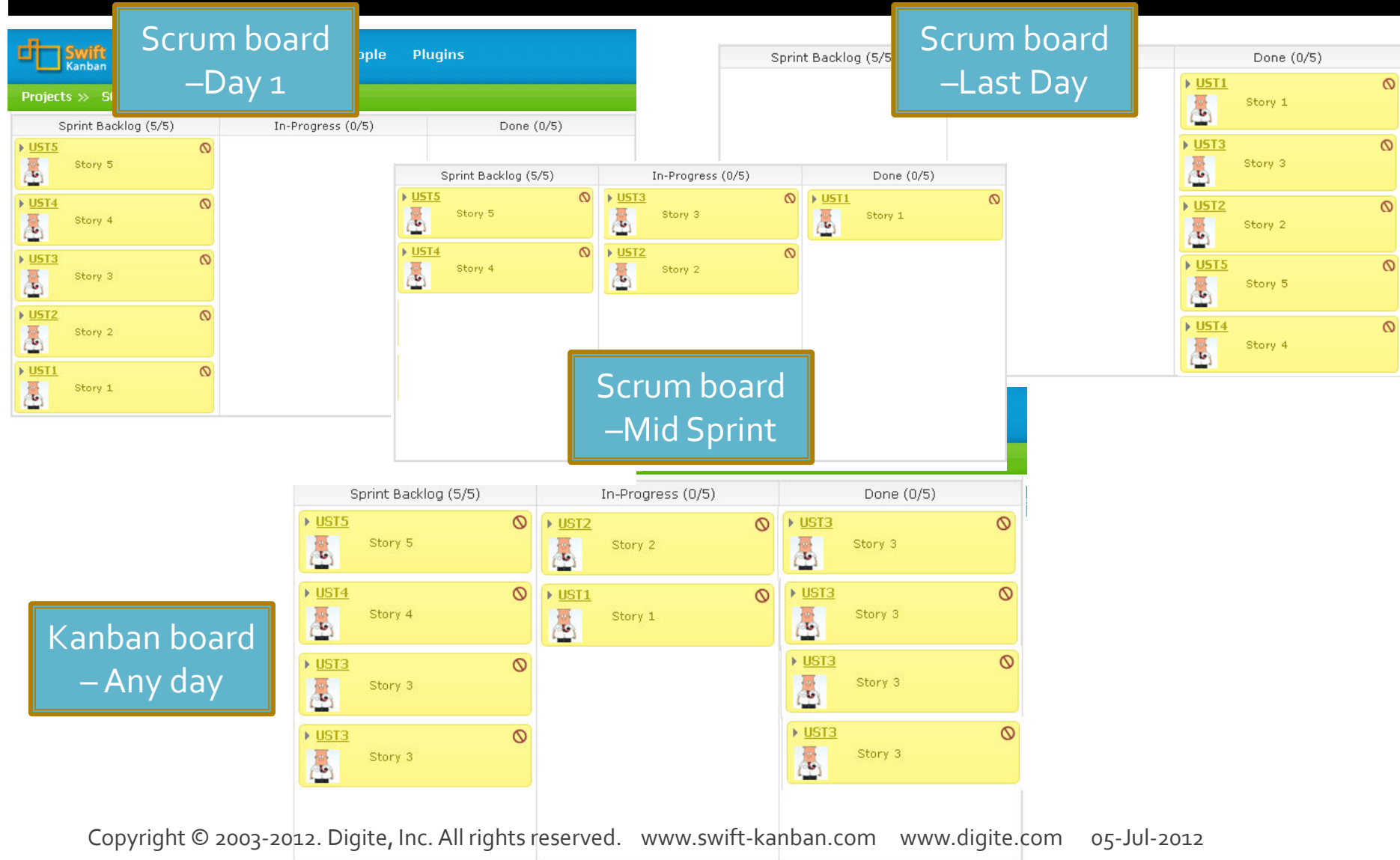
- Late binding of tasks to owners – Enables decoupling of prioritization vs assignment.
- Ready defines what to do next, than a hard plan

Identify & resolve bottlenecks



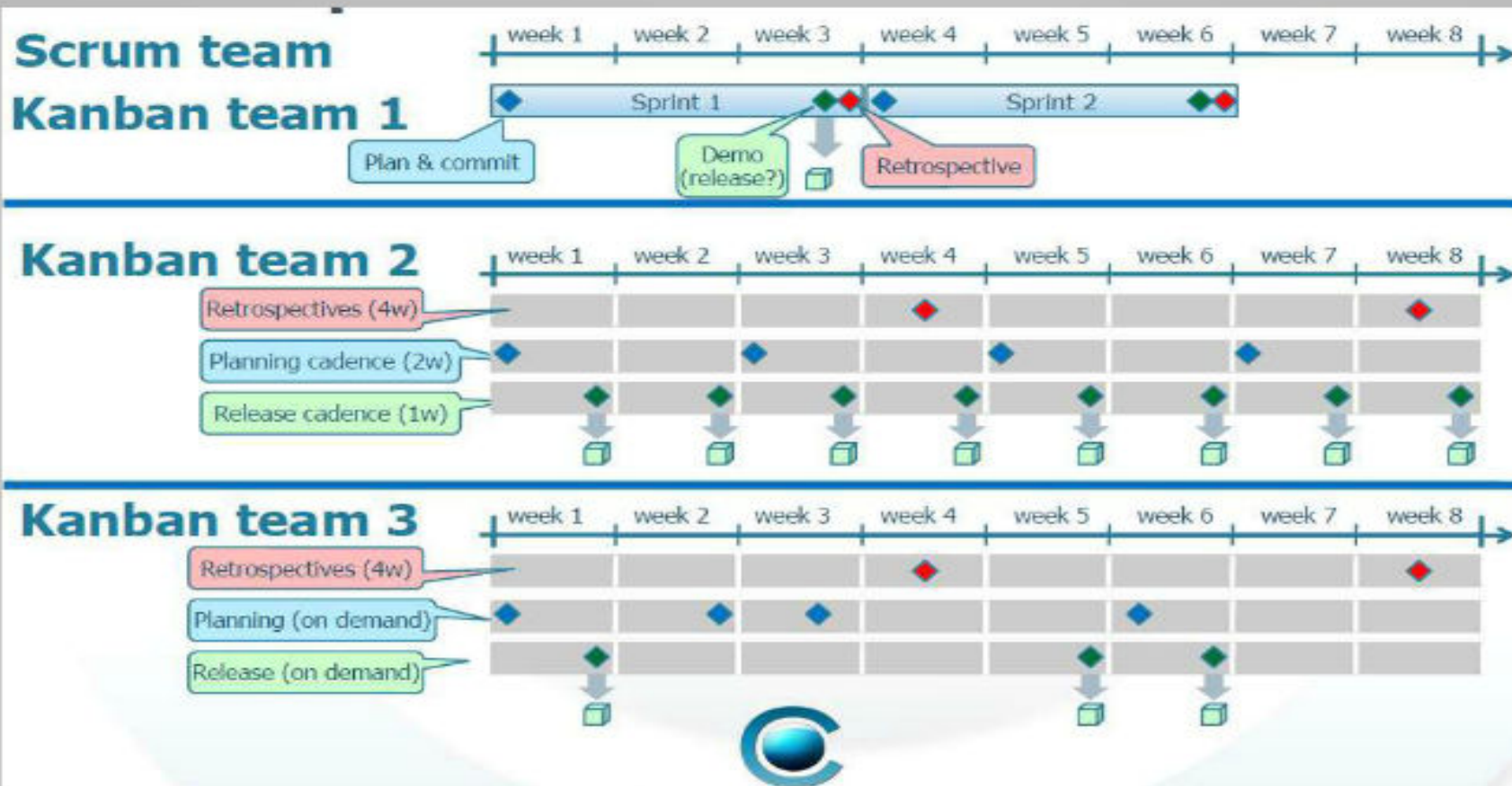
SCRUM vs Kanban

SCRUM vs Kanban - Flow



Timeboxing vs Cadence

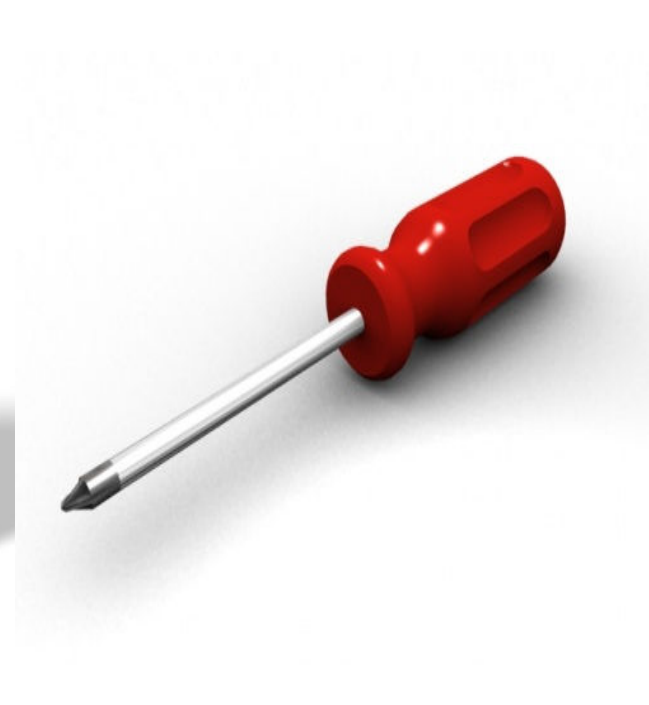
Team Cadence/Heartbeat



Late Scope Additions - Allowed

	SCRUM	Kanban
Timeboxed iterations	Prescribed	Optional
Team commitment	Sprint backlog	Optional
Default metric	Velocity	Lead time
Cross functional teams	Prescribed	Optional Specialist teams allowed
Item size	Completed within 1 sprint	No size prescribed
Follow up diagram	Burndown chart	No prescribed (CFD)
WIP limited	Indirectly (per sprint)	Directly (per WF state)
Estimation	Prescribed	Optional
Adding new items	Not allowed	Whenever capacity is available
Team ownership	Sprint backlog	Board shared by teams
Roles	Prescribed (SM, PO, Team)	Optional
Board reset	After each sprint	Persistent
Prioritization	Prescribes prioritized product backlog	Optional

Who doesn't like cocktails?



Scrum + Kanban = Scrumban

Shaken, not Stirred....New mix

■ Scrum

- Release Planning
- Iteration Planning ~~and fixed iteration scope~~
- Daily Standup - within smaller teams
- Retrospectives
- Agile Engg practices – daily builds, test automation etc.

■ Kanban

- Work Visualization (different than Agile task boards)
- WIP Limits, to discourage multi-tasking
- Test as soon as “done” and release as soon as ‘Tested’
- Dealing with bottlenecks asap
- Focus on smooth “flow”

When to use Kanban?

- Upstream – Manage the backlog process – All the steps preceding the actual development sprint
- Downstream – Management system testing, packaging, deployment
- Or even Sprint execution.....

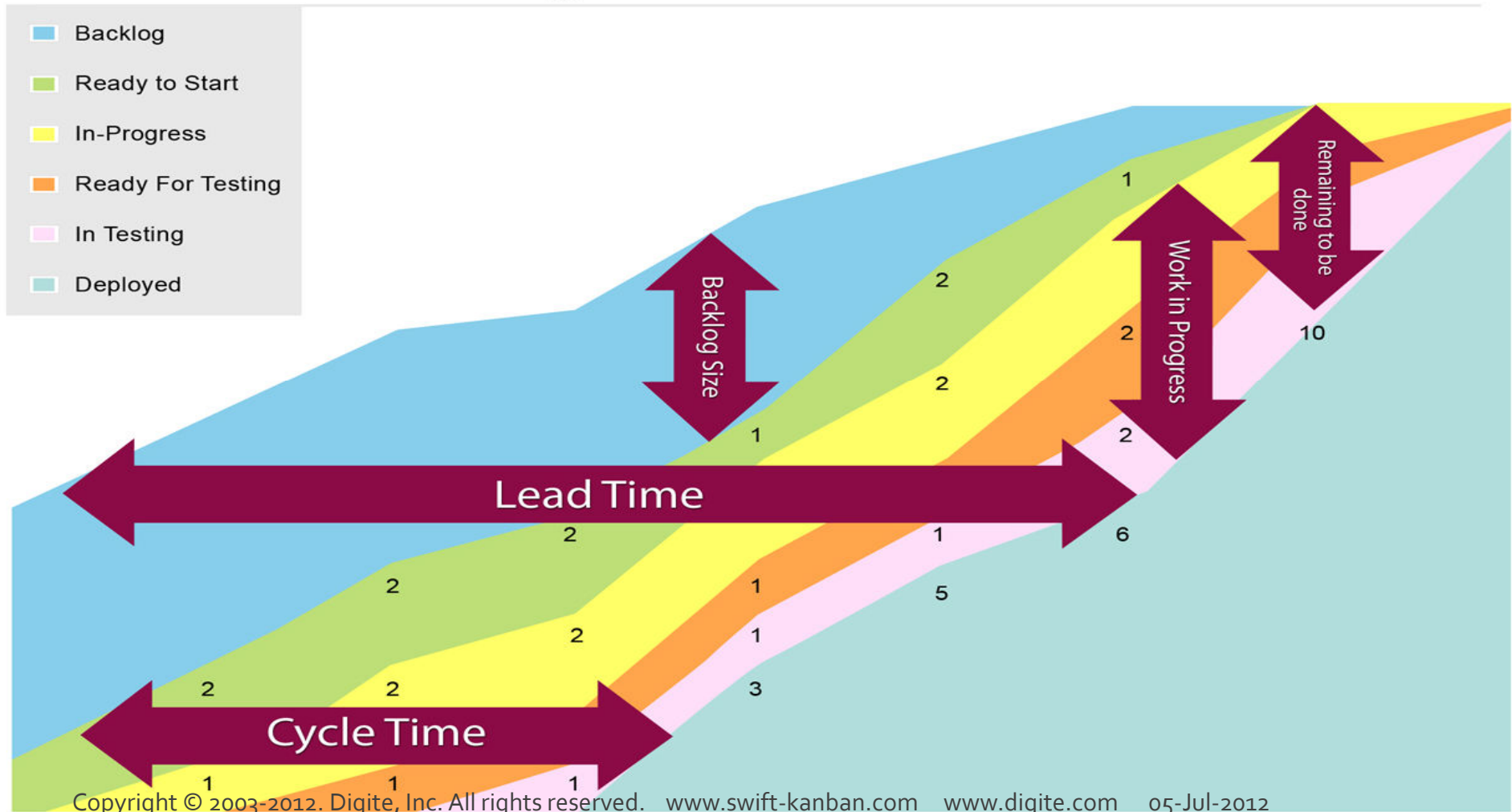
When to consider Scrumban

- Maintenance Work
- Event-driven Work e.g. help-desk/ support
- Projects with frequent and unexpected user stories or programming errors
- New Product Development
- To manage improvement communities during/ after Scrum roll-out

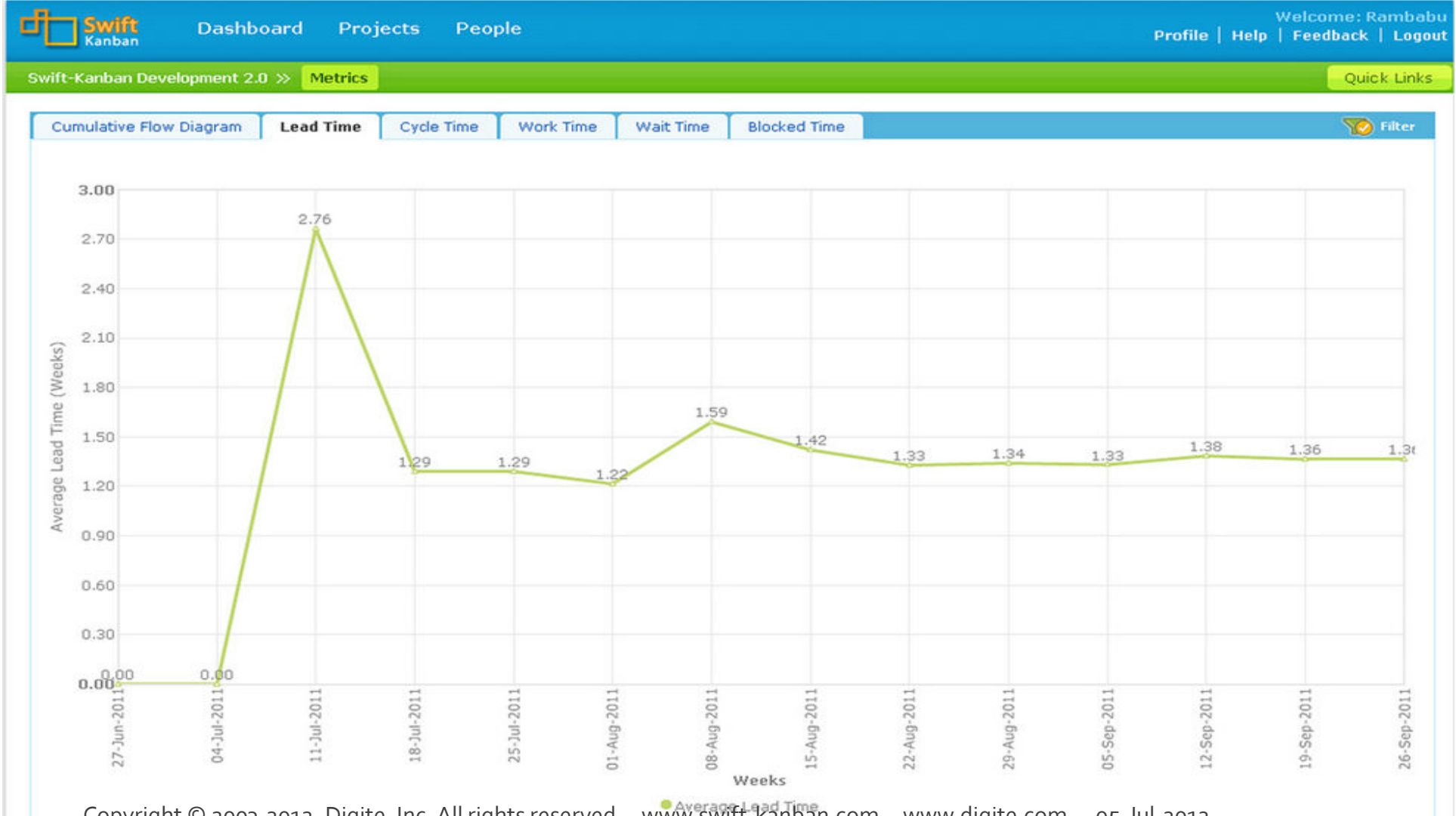
What/ how to measure improvement?

CFD (Cumulative flow diagram)

Cumulative Flow Diagram



Lead/ Cycle Time



Throughput

- Throughput is the rate of delivery of customer valued work into production.
- Two major variables regulate Throughput; WIP and Cycle Time.
- Throughput allows forecasting of future capability.

Benefits

- Better/ “Value” delivery
- Can make releases “Whenever(almost, bug-fixes mainly)
- Much better visibility
- Happy customers/ users. 😊

SCRUMBAN Demo

References

- www.limitedwipsociety.com
- [Works of Corey Ladas on Scrumban](#)
- [Work/blogs of Yuval Yeret](#)
- [InfoQ Blogs](#)
- [Kanbandev - Yahoo group](#)
- www.swift-kanban.com/kanban

Contact us at sales@digite.com to know more or schedule a exclusive product demo