

AN AGILE FRAMEWORK

South Florida Agile Association

http://southfaa.com

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A South Florida software development professional with 20 plus years of experience in the design, construction and deployment of software. The bulk of my experience is as a software developer. Unit test infected since 1999. I have been working as a Software Development Director, focusing on agile development methods since 2013.

INTRODUCTION

- Economic forces are driving companies to develop software faster to gain competitive advantage.
- The software development community has found that agile software development can address the competitive need for speed.
- The Lean Kanban Method adds an agility framework for software development that is simple, efficient with the capacity to improve quality.

KANBAN'S ELEVATOR PITCH



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"For companies with software development teams who are dissatisfied with speed/quality of software development.

The Lean Kanban Method is a new option to improve responsiveness.

Unlike Scrum it does not require hiring new roles. It is an inexpensive method to improve business value."

QUESTIONS?

- Why Kanban?
- Challenges in moving to Kanban?
- How can Kanban transform a team?
- How were obstacles tackled?
- What were the benefits realized?
- Recommendations

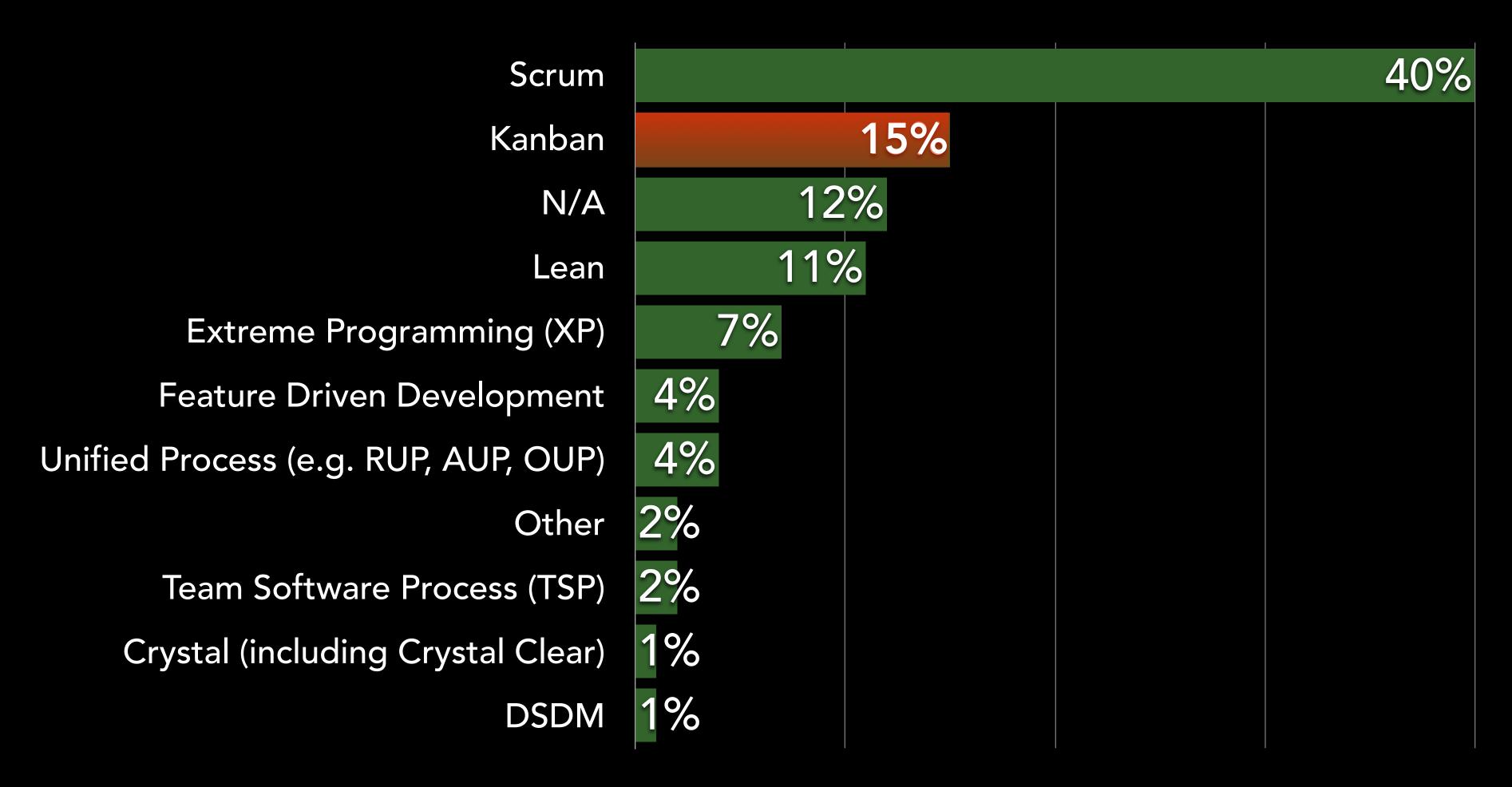
WHY KANBAN?



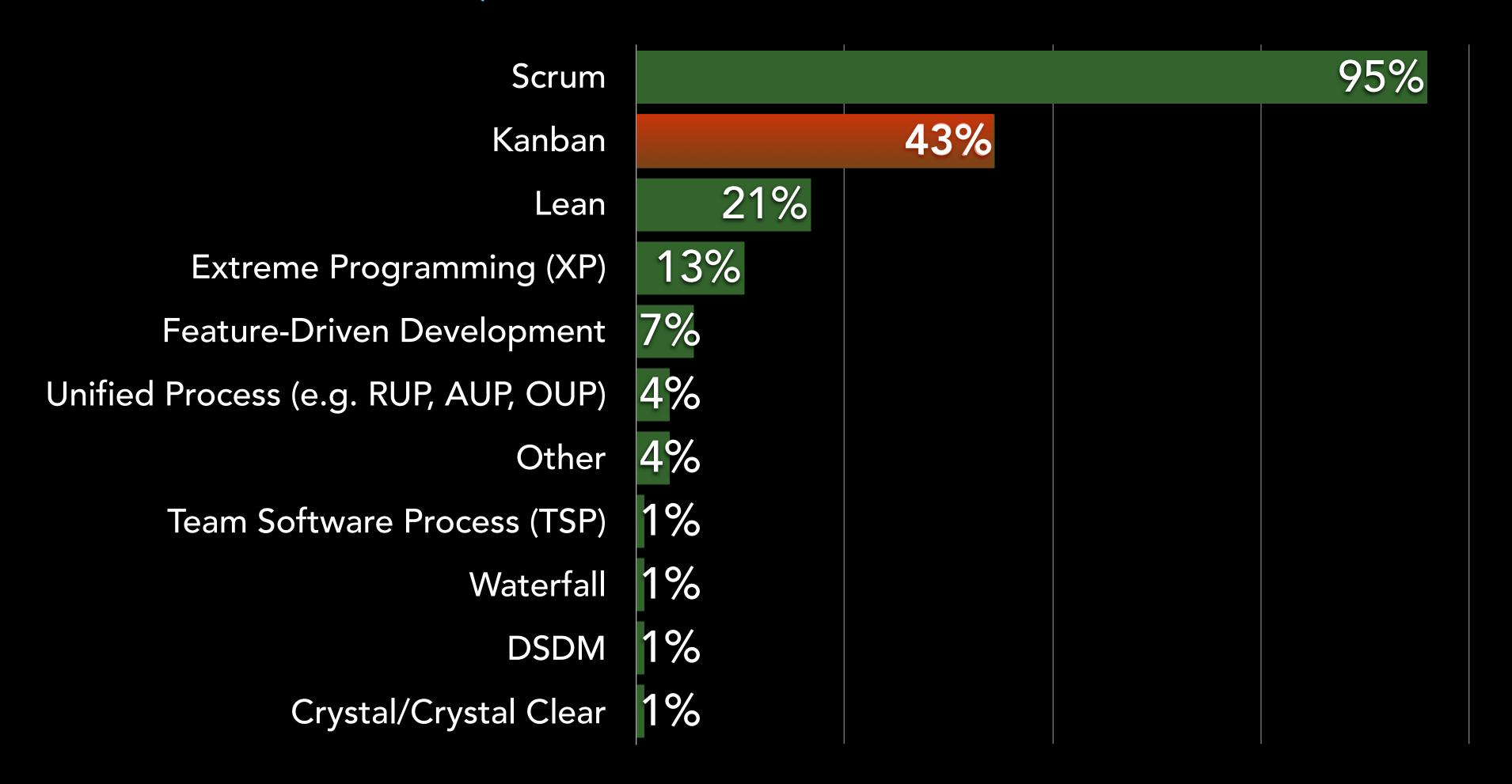
"DO. OR DO NOT. THERE IS NO TRY."



2013: WHAT AGILE APPROACH IS YOUR ORGANIZATION USING (SELECT ALL THAT APPLY)?



2015: WHAT AGILE APPROACH IS YOUR ORGANIZATION USING (SELECT ALL THAT APPLY)?



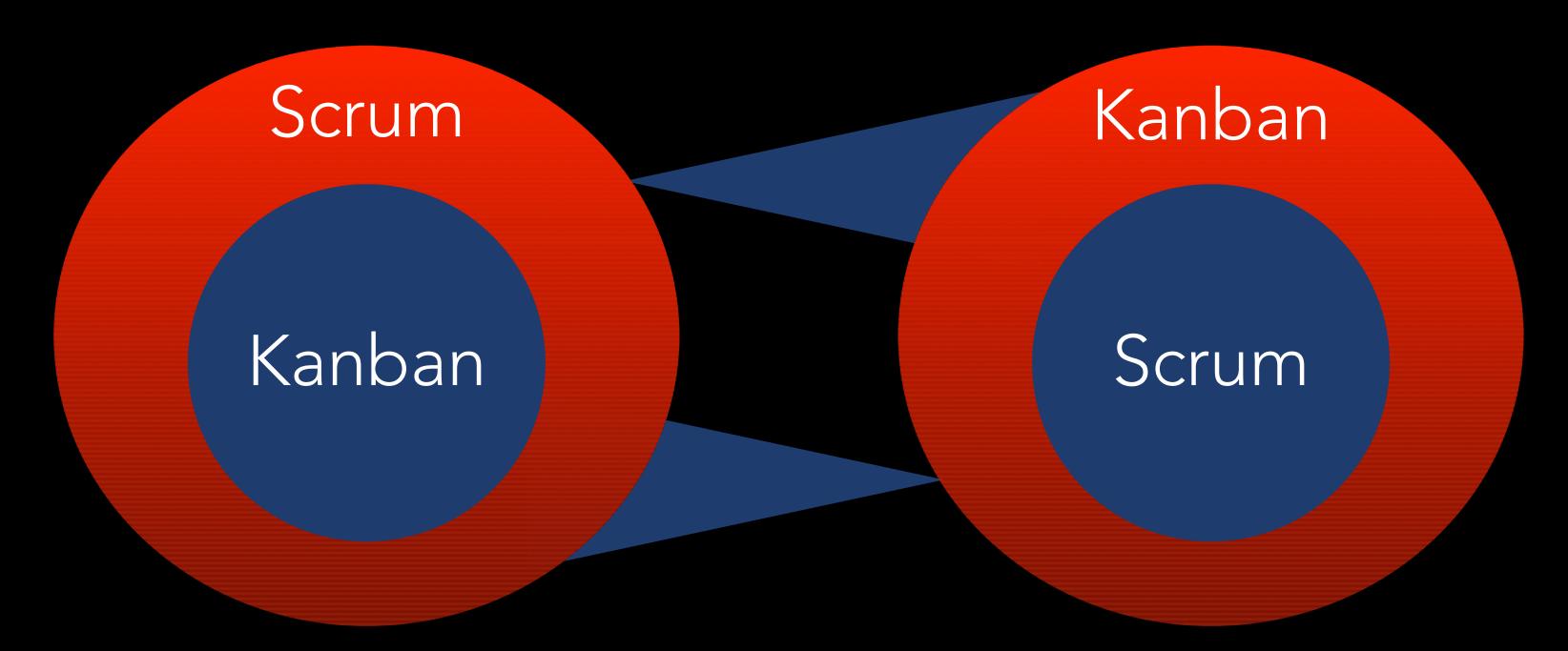
MANY ORGANIZATIONS MIX AND MATCH APPROACHES AND FRAMEWORKS

- Of those using a combination of practices, 63% practice Scrum alongside Waterfall.
- 43% combine Scrum with Kanban.
- 21% combine Scrum with Lean.

SCRUMBAN

- Combination of Scrum and Kanban
- Coined and described by Corey Ladas

Spectrum of combining Scrum and Kanban

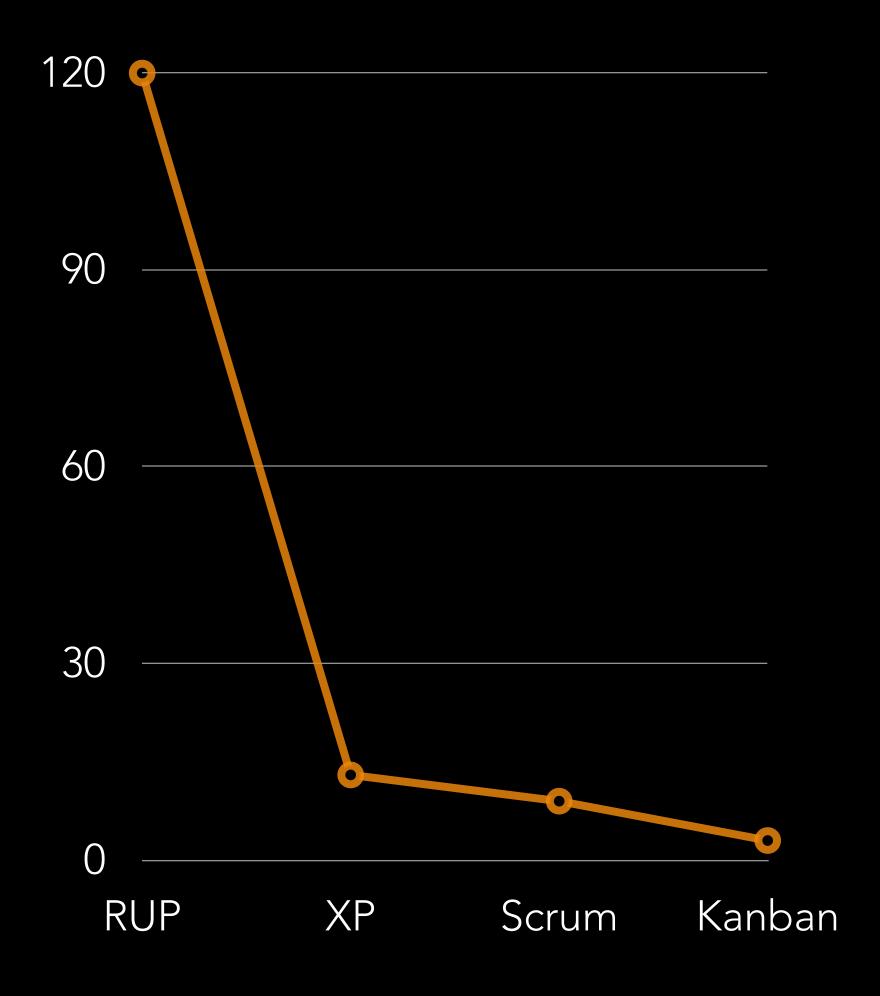


FRAMEWORK VERSUS METHODOLOGY

- A software development framework is an incomplete set of practices needed for software construction. Gaps are filled with additional methods and/or tools to make a working methodology.
- A software development methodology includes a full set of practices and tools needed for software construction. It is common to omit parts of a full methodology that are not appropriate for a given environment.

AGILE METHODS ARE BECOMING MORE ADAPTIVE AND LESS PRESCRIPTIVE

 Counting method roles, activities and artifacts





- A software development agility framework
- Kanban originates from Japanese [かんばん] where kan means "visual" and ban means "card" or "board"
- Influenced by Lean Manufacturing, the Toyota Production System (TPS) and Eliyahu Goldratt's Theory of Constraints (TOC)
- Developed by David J. Anderson

KANBAN HELPS AGILE BE AGILE

- Accelerate time to market
- More easily manage changing priorities
- Better align IT and business objectives
- Increase productivity
- Enhance software quality
- Project visibility

REASONS FOR KANBAN ADOPTION

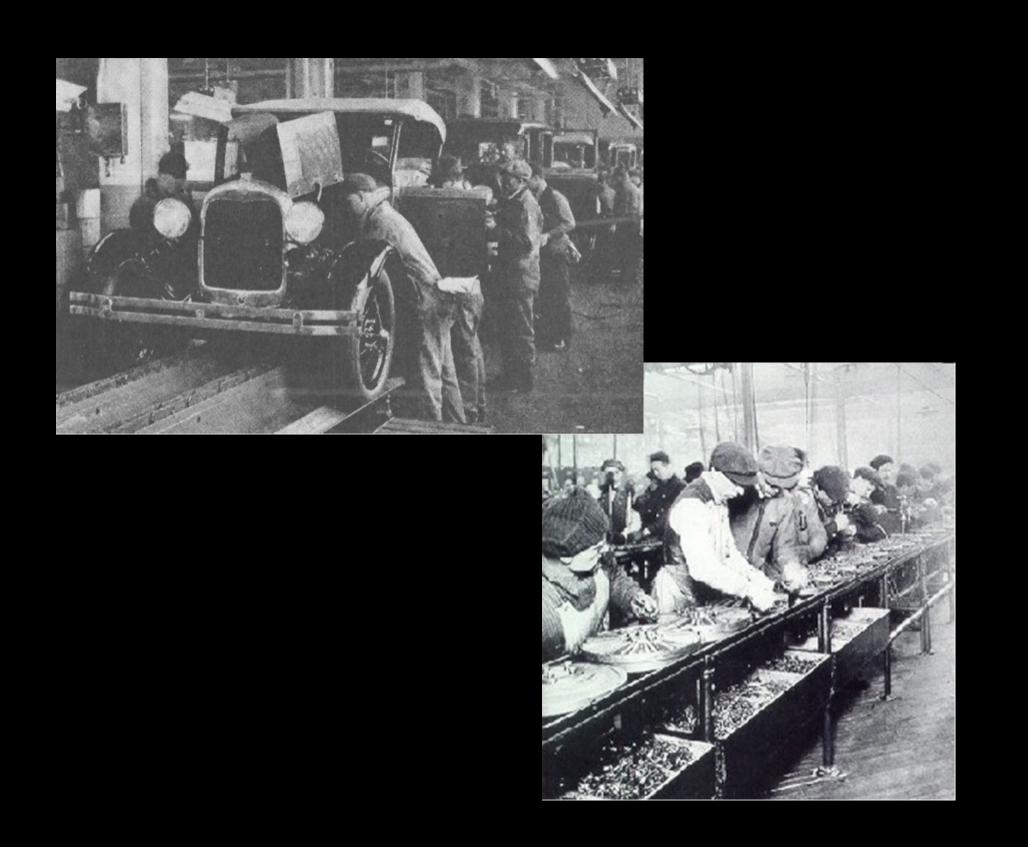
- Other Agile methods didn't make sense
- Evolutionary step for Agile methods
- Need ability for daily task reschedule
- Organization resistance

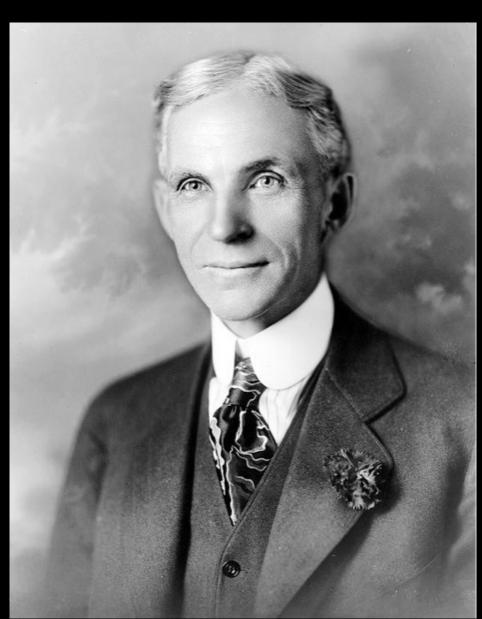
IMPORTANT CONCEPTS

- Let's discuss a few terms
 - Flow
 - Pull
 - Kaizen

WHAT IS FLOW?

Henry Ford pioneered the assembly line aka "flow lines"





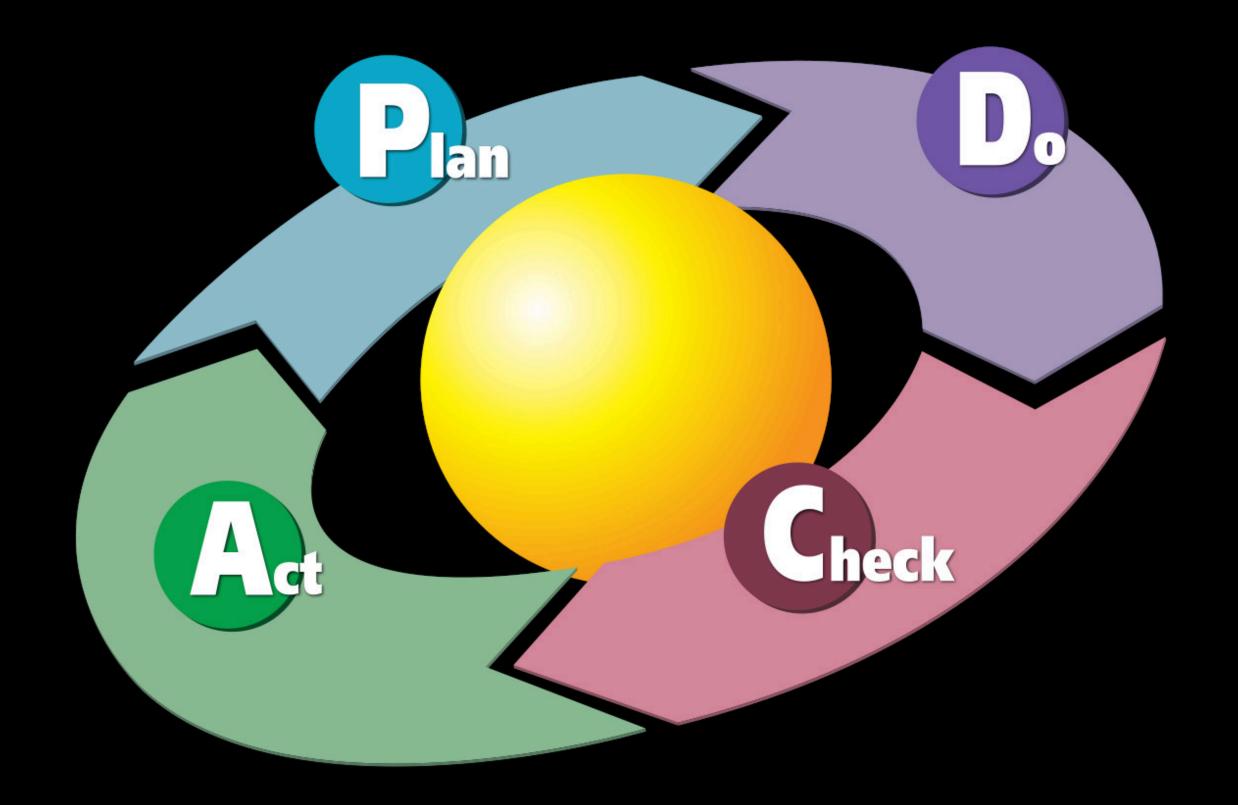
WHAT IS PULL?

Grocery store refills items based on customer "pulling" inventory



WHAT IS KAIZEN?

Kaizen (改善), Chinese and Japanese for "improvement"



CONCEPT REVIEW

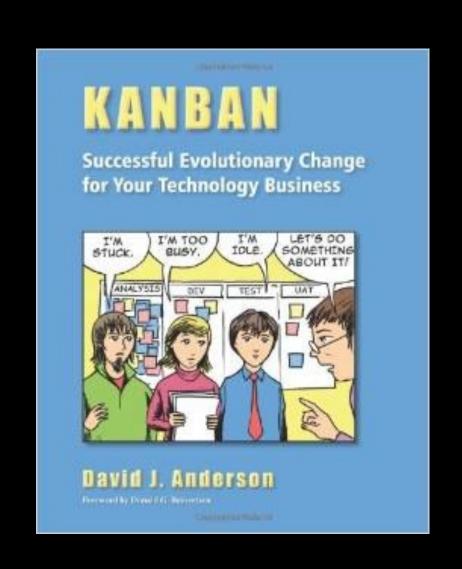
- Quick review of important concepts
 - Flow
 - Pull
 - Kaizen

WHAT IS THE KANBAN METHOD?

"... I describe Kanban (capital K) as the evolutionary change method that utilizes a kanban (small k) pull system, visualization, and other tools to catalyze the introduction of Lean ideas into technology development and IT operations."

David J. Anderson (2010).

Kanban
Successful Evolutionary Change
for Your Technology Business





- Guiding Principles
- Core Practices

KANBAN METHOD PRINCIPLES

- Start with what you know
- Agree to pursue evolutionary change
- Initially, respect roles, responsibilities and job titles
- Encourage acts of leadership at all levels

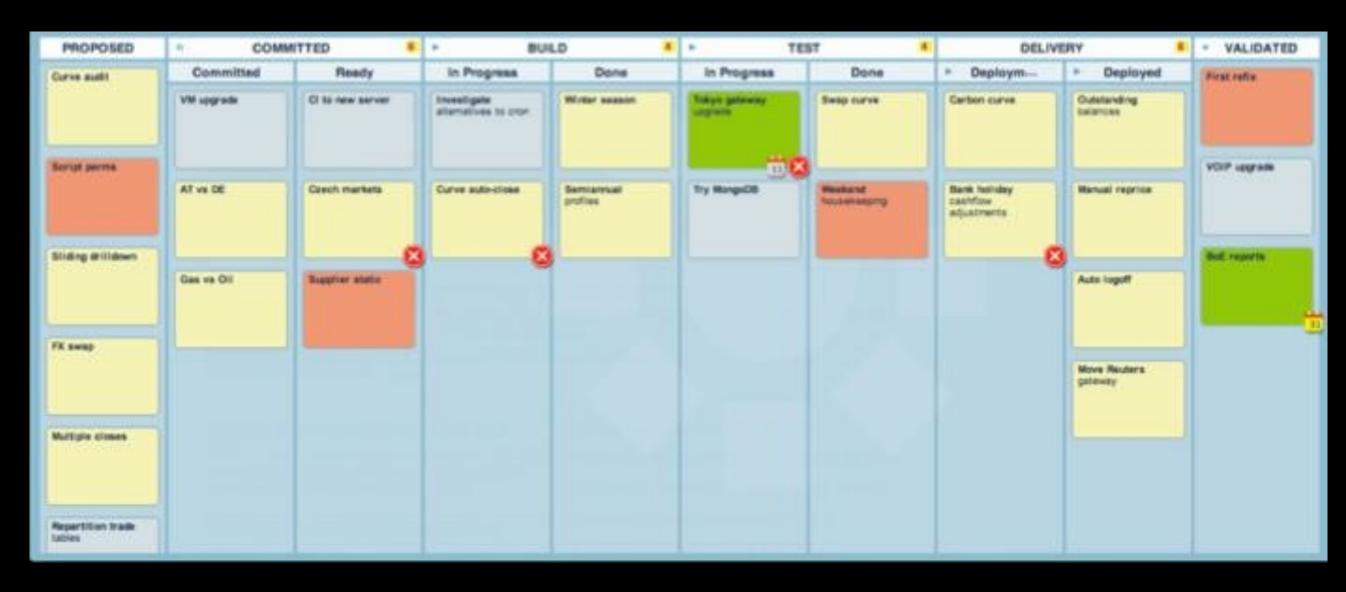
KANBAN METHOD PRACTICES

- Visualize
- Limit work-in-progress (WIP)
- Manage flow
- Make policies explicit
- Implement feedback loops
- Improve collaboratively, evolve experimentally (using models and the scientific method)

VISUALIZE

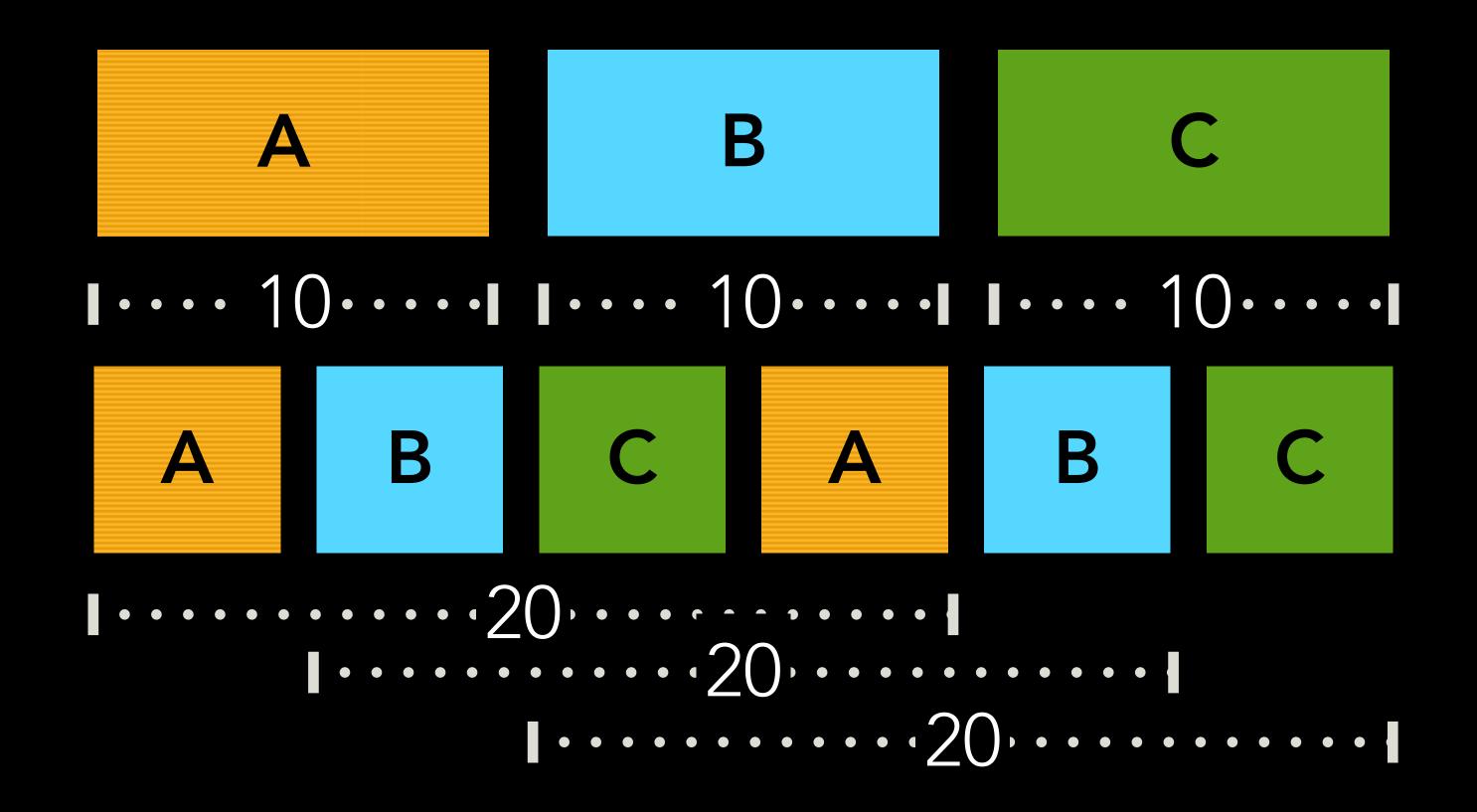
- Kanban boards
- Visual work management





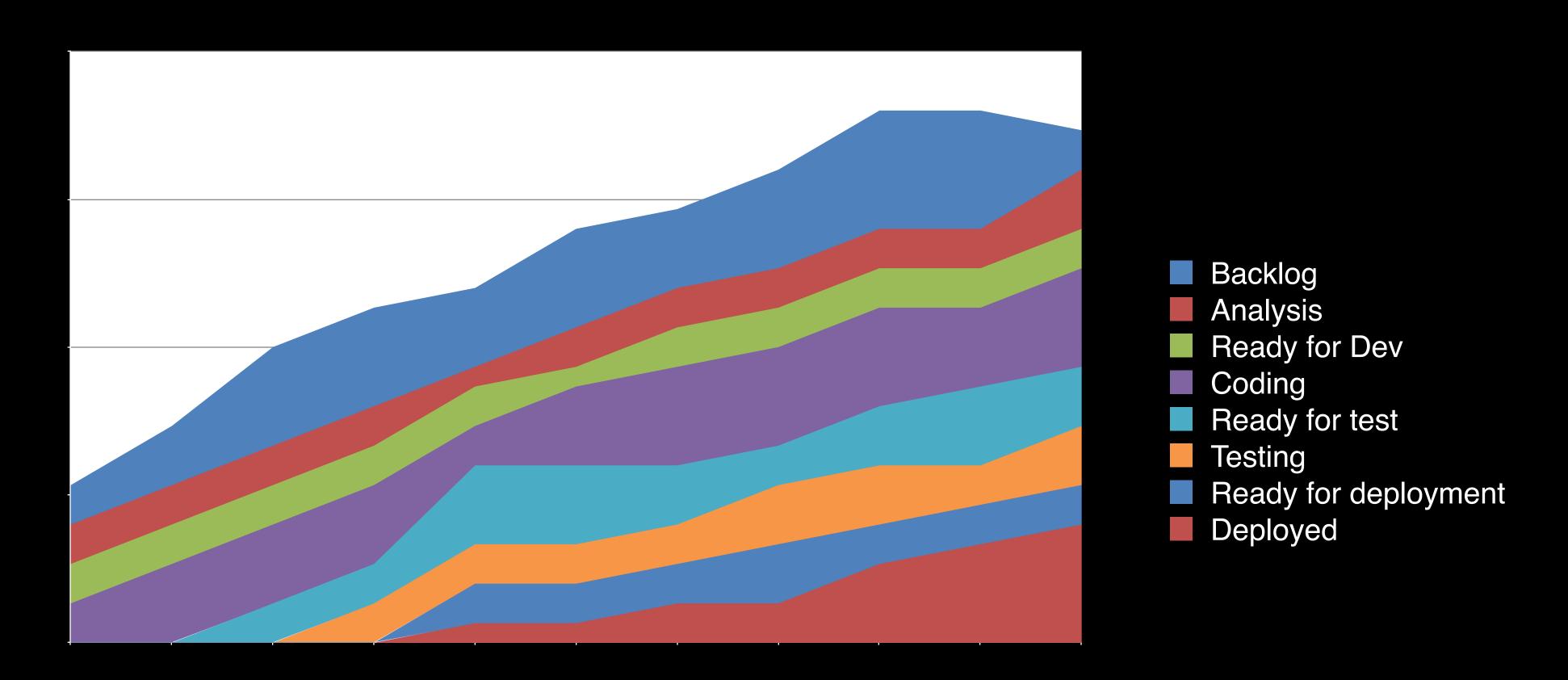
LIMIT WORK IN PROGRESS (WIP)

"Do you realize what impact multi-tasking has on lead time?"



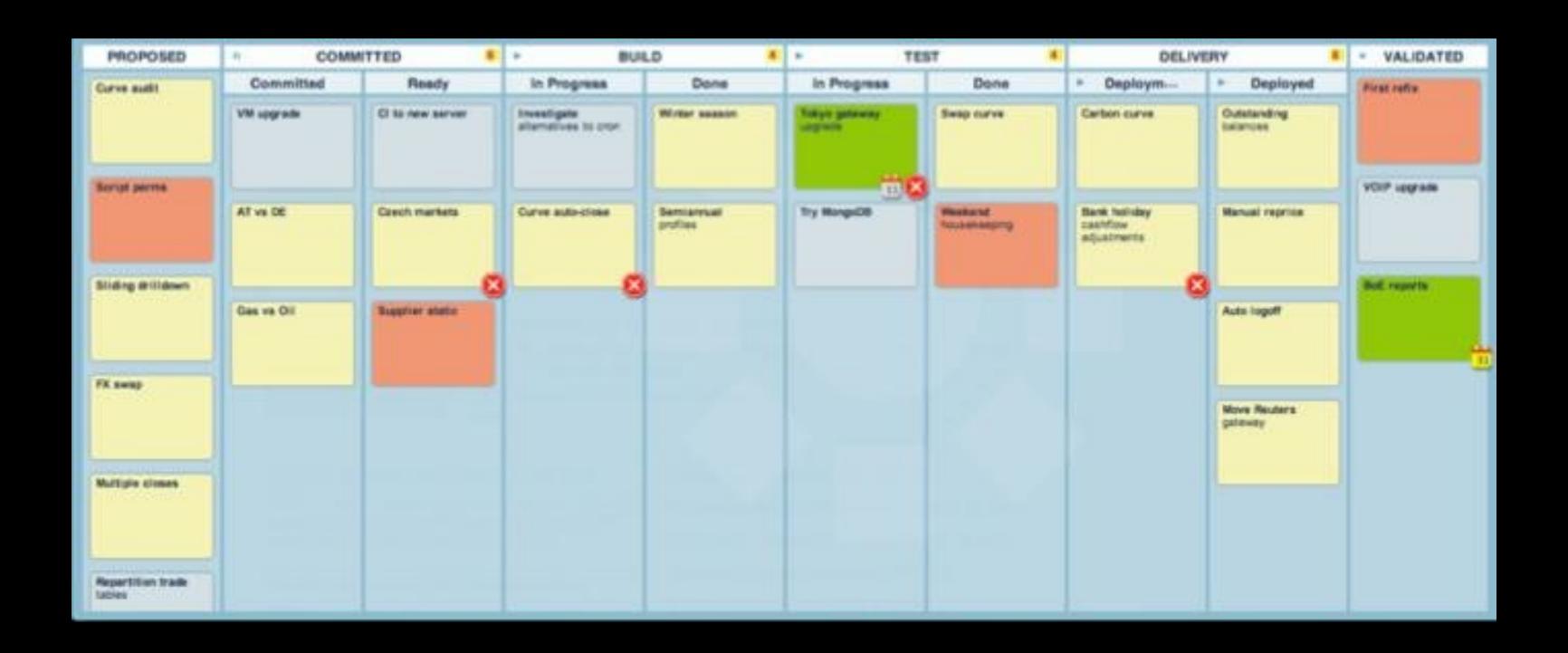
MANAGE FLOW

Cumulative Flow Diagrams (CFD)



MAKE POLICIES EXPLICIT

- Explicit policies are on the board.
- Board rules



IMPLEMENT FEEDBACK LOOPS

- Daily standup meetings
- Weekly replenishment meetings
- Monthly operations review meetings

IMPROVE, EVOLVE

 Improve collaboratively, evolve experimentally (using models and the scientific method).

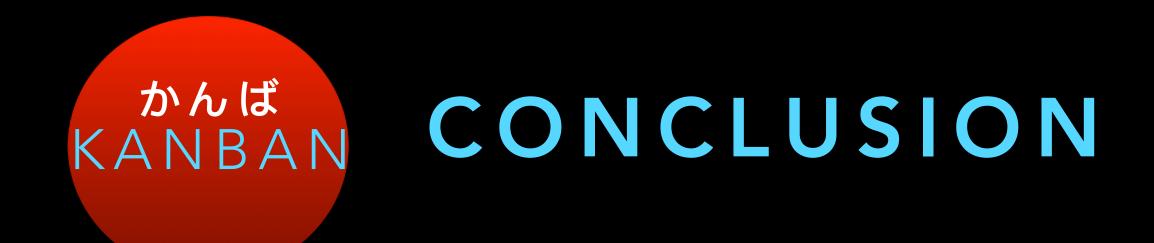
SCRUM, KANBAN OR SCRUMBAN?

- Do you have separate teams for new development and maintenance?
- Do you have a enough people for a cross-functional Scrum team?
- Can your team focus for 2-4 weeks with minimal interruption?
- Is the company culture against Agile?



TOP TEN SIGNS YOUR KANBAN IS NOT WORKING

- 1. Where is Kaizen?
- 2. Violating WIP limits.
- 3. Lacking Agile Engineering practices.
- 4. Not knowing what to do (explicit rules).
- 5. No visual workflow.
- 6. Tasks are not flowing.
- 7. Not updating the board.
- 8. Not showing actual work on the board.
- 9. Missing work on the board.
- 10. We can't start till we get everything right.

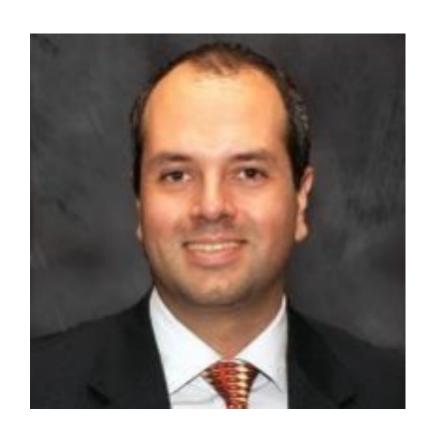


- Kanban provides an agile framework that works along with other software development methods or by itself.
- Kanban's ease of implementation allows for its deployment in a wide variety of environments.
- Kanban is a method that can be incorporated into all aspects of IT include portfolio management, software development and operations.

KANBAN TRAINING/MENTORING

Rodrigo de Toledo provided training and mentoring for me and my team.

Thank you Rodrigo.



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SOUTH FLORIDA KANBAN

YOU ARE NOT ALONE



















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THANK YOU MEETING SPONSORS







WHY KANBAN



Thank You

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