

Kanban

Course Overview

This training course teaches participants that delivering software functionality using Kanban is radically different from traditional waterfall project management. Rather than plan, instruct, and direct; Kanban utilizes a Lean "pull" implementation to guide the work through the process. Using Kanban enhances organization agility, improves visibility of work flowing through the process, and provides greater transparency for impediments that inhibit throughput. Participants learn how to implement Kanban and all of the controls and reporting necessary to monitor the flow of work. Labs, case studies, and examples are used to bring home the realization of how to implement Kanban.

In addition to the labs that are part of the training curriculum, an optional day is available where our instructor will work with your organization to design a roadmap for implementing Kanban using the existing processes. This session culminates with a Kanban board that can be used immediately for making work visible.

No prior experience needed, this course can fit any skill level.

Key Outcomes

Upon completion of this course, participants will be able to:

- Understand the origins of Kanban, the theory behind it and how it relates to agile software development
- Know how to complete a "Value Stream Mapping" and what to include
- Comprehend throughput and how to organize the work
- Grasp how to manage the process and the input queue
- Understand options for tuning the Kanban implementation
- Comprehend relevance and implementation of key metrics

Course Outline

Kanban Overview and Introduction

- House of Lean
- Defining Kanban
- Motivation for Kanban
- Managing Quality
- Work In Progress (WIP)
- How to Prioritize
- Demand vs Throughput
- Sources of Variability

Value Stream Mapping (seeing the big picture)

- The Value Stream
- Making Work Visible
- Value Stream Lab (Part 1 – Defining the Start and the End)
- Card Walls
- Demand Analysis
- Allocating Capacity
- The Work Card
- Value Stream Lab (Part 2 – Designing the Card Wall)

At-a-Glance:

Course Length:
2 days

Course Number & Level:
244.KAN2 – Foundational

Professional Development Units (PDUs): 14 (Technical)

Delivery Options:

- Instructor-led Training (Delivered Onsite at Your Location)

Throughput

- Identifying Work Item Types
- Sizing Work Items
- Building User Stories
- User Story Lab
- Story points
- Visual Control
- Pull vs. Push
- Theory of Constraints
- Service Levels: Class of Service
- Throughput Application Lab (Incorporating Class of Service into the Card Wall)

Managing the Process

- Daily Standup Meetings
- After Meetings
- Queue Replenishment Meetings
- Release Planning Meetings
- Triage
- Geographically Dispersed Teams

Improving the Process

- The Importance of Cadence
- Limiting Work-In-Progress
- Identifying Bottlenecks
- Removing Waste from the Value Stream
- Lab – The Dot Game: Sizing Work-In-Progress Lab (Factoring Bottlenecks to determine Queue Sizing and the impact to WIP)

Key Metrics Review

- WIP
- Lead Time Throughput and Measuring Flow
- Blocked Work
- Quality
- Failure Load

Day Three – Optional: Summary Session Lab – Putting It Altogether

- This lab is devoted to incorporating specific Kanban principles to current in-house issues. Participants to provide real examples of work flow and work with the instructor to get the foundation for Kanban setup. Deliverable is a Card wall the participants can begin using immediately.