

Lean-Kanban Workshop

The workshop will start off by familiarizing participants with Lean Software Development Concepts, Principles and Practices by providing them with practical examples and hands-on exercises to help them understand and experience some of them.

The workshop then will walk the participants through a series of steps to help them learn how a "Kanban System" can be implemented to start putting the Lean Principles that they have learned - into practice.

The Kanban exercises within the workshop are such that they can be applied to the team's unique needs and circumstances – to their work situations. Thus the workshop hopes to address the Team's key challenges and thereby maximize their learning, retention and engagement.

Objectives:

- < To introduce participants to Lean Software Development – and provide a historical context of Lean.
- < To create an awareness of Lean Software Development's ideas, explain the rationale behind them - and – and wherever possible – with hands-on exercises.
- < To have teams get started in thinking about and identifying improvement opportunities at their workplace – using Lean ideas - and explore how many of these Lean Thinking tools can be applied almost immediately to achieve better work results.
- < An introduction to "The Kanban Method" - as a way of implementing Lean Principles.
- < The values, principles and practices associated with Kanban & their significance and importance.
- < How to go about implementing a "Kanban System" through the steps of 1) visualizing workflows (sometimes referred to as Value Stream Mapping), 2) designing Kanban boards – to support their individual team's workflow, 3) identifying some of their work items types, 4) Design of Kanban ticket – and what information is important to capture, 5) the ways that they can go about deciding WIP limits and 6) using various techniques to enable flow.
- < To speak about various meetings and their cadences – such as 1) planning, 2) Daily stand-ups, 3) Reviews, 4) Retrospectives, 5) Operational Reviews, etc. – and answer questions on how these differ from similar Scrum meetings.
- < Kanban Metrics – what is measured, why, and how they can be used towards our goals and objective/s.
- < A demonstration of an online Kanban simulation – which will demonstrate how Kanban will likely work in actual software development environment (subject to Internet access).

Audience:

The workshop is for team members, select Vendor Associates and Managers who are now interested in learning about Lean Software Development process – and how to implement it using "The Kanban Method".

Each workshop will accommodate multiple teams (up to 4 teams or 20 people, max. to ensure sufficient oversight and quality of attention). The members of the individual teams will be working together in learning the Principles and Practices associated with Lean and Kanban.

Pre-requisites:

None

Duration:

1 day

Outline:

1. Learning Module 1 - Introduction to Lean in IT & Software Development

- Introductions, Assessment of Current Knowledge Levels, Agenda & Learning objectives
- Start of Presentation, Discussions & Exercises:
- Evolution of Lean & Lean in IT and Software Development;
- Lean as validating adjunct to Agile
- Lean IT & Software Development Principles - Why they are important and how they can be applied.
- Lean Principles – with embedded exercises within the presentation. (A few principles and/or exercises can and will be skipped based on time availability and the flow within the workshop).
- Visualizing Work – why is it important in s/w and IT - and the effect it has
- Enabling workflows
- Push vs. Pull systems: Optional exercise - The Paperclip Exercise
- Batch Sizes and Single Piece flow: Optional exercise - The Penny Exercise
- Little's law (from Queuing Theory) – The rationale for Limiting W-I-P (Work in process)
- Limiting WIP: Balancing Utilization with Throughput
- The Inefficiencies of Multitasking: Optional Exercise - The Name Exercise
- Introduction to the "Theory of Constraints" to address Bottlenecks;
- Identifying Bottlenecks : Optional Exercise - The bottleneck resolution Exercise
- Examples of The Five Focusing steps, to resolve bottlenecks
- Listing the various kinds of Wastes in IT and Software Systems
- Exercise – Based on above – Team discussions on identifying waste within their work area

2. Break # 1

3. Learning Module 2: An Introduction to Kanban

- An Introduction to Kanban
- Kanban as a way of implementing Lean Flow Principles in S/w and IT
- Identifying Workflows
- Exercise – Identifying Team's Work flow
- Designing Kanban Boards - Examples of Board Designs
- Exercise - Designing a Board to reflect the team's workflows
- Examples of Work Items

- Exercise – Identifying work items of the Team
- Elements of Kanban ticket
- Exercise - Designing the team's Work tickets

4. Break # 2

5. Learning Module 3: An Introduction to Kanban (continued)

- Various ways of setting WIP (Work in Process) Limits
- Exercise – Team discussion on their rationale for setting their WIP limits
- Kanban Metrics
- Lead Times & Cycle Times
- Cumulative Flow Diagrams
- Reading and Interpreting Cumulative Flow Diagrams
- Control Charts – How to use them for Forecasting and SLAs
- FE and how to improve your flow
- Discovering metrics you care about
- Optional: Classes of Service and Risk
- Optional: Understanding and resolving bottlenecks
- Optional: Walk-through of an online Kanban learning Simulation exercise – to get a sense of how a Kanban implementation could likely unfold in real life. (and Subject to Internet access availability).
- Workshop Retrospective: The 4L Retrospective (Learnt, Liked, Lacked, Longed for)
- Means of follow up

6. Formal End of the Workshop