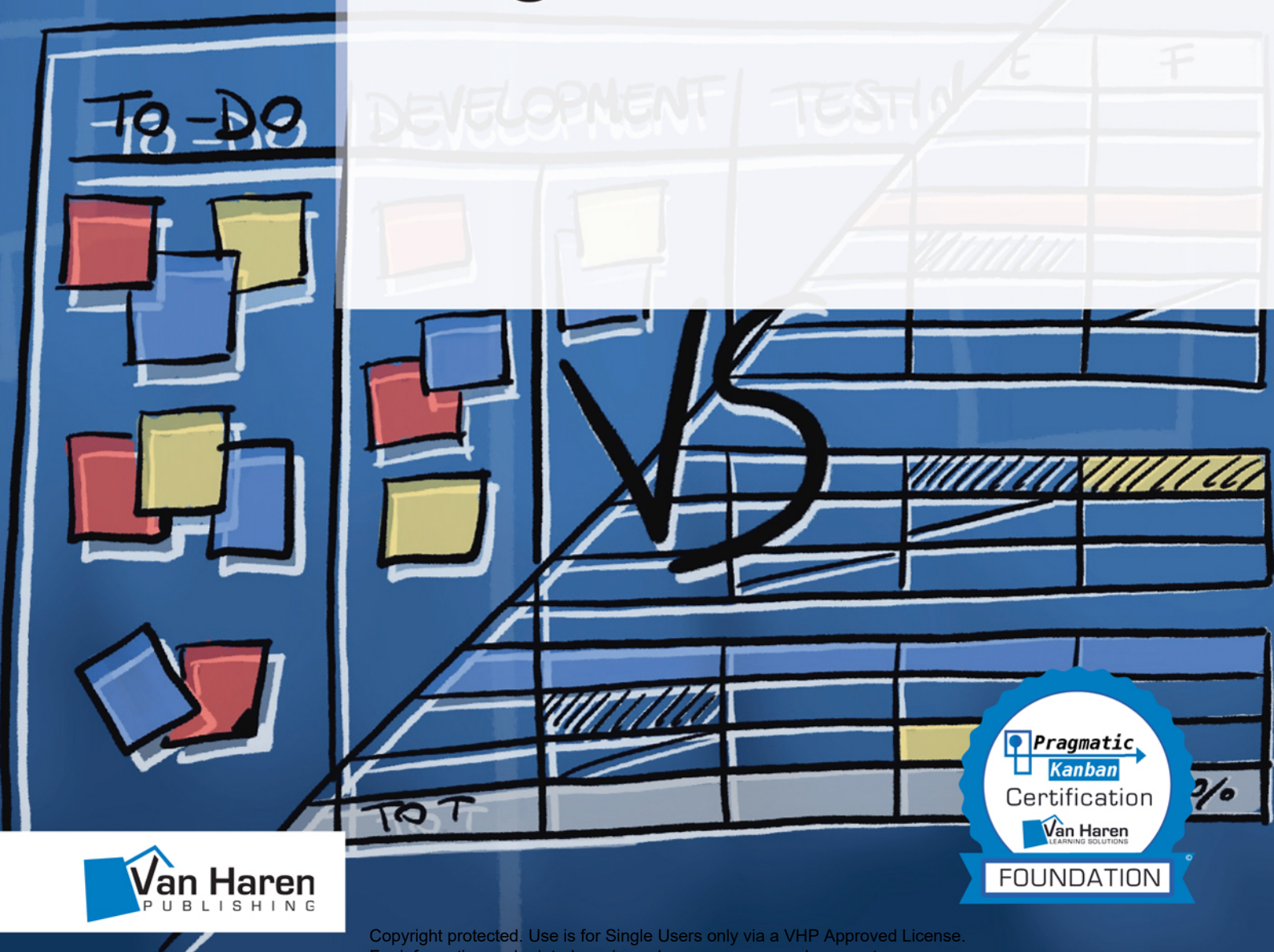
COURSEWARE

Kanban Foundation Courseware

English



Pragmatic Kanban Certification
Van Haren Learning Solutions
FOUNDATION

Van Haren PUBLISHING

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

Pragmatic Kanban Foundation
Courseware - English

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

Colophon

Title:	Pragmatic Kanban Foundation Courseware - English
Author:	Jeroen Venneman and Jasper Sonnevelt
Illustrations:	Isabella De Felip
Publisher:	Van Haren Publishing, ‘s-Hertogenbosch
ISBN Hard Copy:	978 94 018 0542 1
Edition:	First print, Second Edition, March 2020
Design:	Isabella De Felip
Copyright:	© Van Haren Publishing 2020

For further information about Van Haren Publishing please e-mail us at: info@vanharen.net or visit our website: www.vanharen.net

All rights reserved. No part of this publication may be reproduced, distributed, stored in a data processing system or Published in any form by print, photocopy or any other means whatsoever without the prior written Consent of the authors and publisher.

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

Publisher about the Courseware

The Courseware was created by experts from the industry who served as the author(s) for this publication. The input for the material is based on existing publications and the experience and expertise of the author(s). The material has been revised by trainers who also have experience working with the material. Close attention was also paid to the key learning points to ensure what needs to be mastered.

The objective of the courseware is to provide maximum support to the trainer and to the student, during his or her training. The material has a modular structure and according to the author(s) has the highest success rate should the student opt for examination. The Courseware is also accredited for this reason, wherever applicable.

In order to satisfy the requirements for accreditation the material must meet certain quality standards. The structure, the use of certain terms, diagrams and references are all part of this accreditation. Additionally, the material must be made available to each student in order to obtain full accreditation. To optimally support the trainer and the participant of the training assignments, practice exams and results are provided with the material.

Direct reference to advised literature is also regularly covered in the sheets so that students can find additional information concerning a particular topic. The decision to leave out notes pages from the Courseware was to encourage students to take notes throughout the material.

Although the courseware is complete, the possibility that the trainer deviates from the structure of the sheets or chooses to not refer to all the sheets or commands does exist. The student always has the possibility to cover these topics and go through them on their own time. It is recommended to follow the structure of the courseware and publications for maximum exam preparation.

The courseware and the recommended literature are the perfect combination to learn and understand the theory.

-- Van Haren Publishing

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

Other publications by Van Haren Publishing

Van Haren Publishing (VHP) specializes in titles on Best Practices, methods and standards within four domains:

- IT and IT Management
- Architecture (Enterprise and IT)
- Business Management and
- Project Management

Van Haren Publishing is also publishing on behalf of leading organizations and companies: ASLBiSL Foundation, BRMI, CA, Centre Henri Tudor, CM Partners, Gaming Works, IACCM, IAOP, IFDC, Innovation Value Institute, IPMA-NL, ITSqc, NAF, KNVI, PMI-NL, PON, The Open Group, The SOX Institute.

Topics are (per domain):

IT and IT Management

ABC of ICT
ASL®
CMMI®
COBIT®
e-CF
ISO/IEC 20000
ISO/IEC 27001/27002
ISPL
IT4IT®
IT-CMF™
IT Service CMM
ITIL®
MOF
MSF
SABSA
SAF
SIAM™
TRIM
VeriSM™

Enterprise Architecture

ArchiMate®
GEA®
Novius Architectuur Methode
TOGAF®

Business Management

BABOK® Guide
BiSL® and BiSL® Next
BRMBOK™
BTF
CATS CM®
EFQM
eSCM
IACCM
ISA-95
ISO 9000/9001
OPBOK
SixSigma
SOX
SqEME®

Project Management

A4-Projectmanagement
DSDM/Atern
ICB / NCB
ISO 21500
MINCE®
M_o_R®
MSP®
P3O®
PMBOK® Guide
Praxis®
PRINCE2®

For the latest information on VHP publications, visit our website: www.vanharen.net.

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

Table of content

	--- Slide number	--- Page number
Reflection		7
Class objectives		9
Agenda		10
Course outline and objectives	(2)	11
1. Introduction	(10)	15
1.1 Lean, Agile	(12)	16
1.2 Kanban: history, principles and practices	(24)	22
1.3 Experiencing Kanban	(43)	31
1.4 Dynamics and behaviours	(45)	32
1.5 Measuring for success	(54)	37
1.6 Experiencing Kanban	(59)	39
2. Visualizing your work with Kanban	(63)	41
2.1 Visualisation	(65)	42
2.2 Identifying the work	(73)	46
2.3 Experiencing Kanban	(75)	47
2.4 Using a Kanban board	(81)	50
2.5 Kanban board designs	(88)	54
2.6 Dealing with special types of work	(95)	57
2.7 Experiencing Kanban	(98)	59
3. Meetings, events and cadences	(102)	61
3.1 Introduction	(104)	62
3.2 Experiencing Kanban	(109)	64
4. Improving Flow	(114)	67
4.1 Introduction	(116)	68
4.2 Finding opportunities for improvement	(122)	71
4.3 Manage bottlenecks	(131)	75
4.4 Solving impediments	(135)	77
4.5 Experiencing Kanban	(138)	79
5. Metrics and incremental improvements	(144)	82
5.1 Introduction	(146)	83
5.2 Experiencing Kanban	(153)	86

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

6. Predictable delivery	(165)	92
6.1 Predictable delivery	(167)	93
6.2 Time to market and delivery speed	(169)	94
6.3 Forecasting and planning	(174)	97
6.4 Experiencing Kanban	(180)	100
7. Scaling Lean/Agile delivery with Kanban	(184)	102
7.1 Introduction	(186)	103
7.2 Experiencing Kanban	(190)	105
Course summary and wrap up	(194)	107
Pragmatic Kanban Foundation Case	(198)	109
Pragmatic Kanban Foundation Practice Exam		118
Pragmatic Kanban Foundation Practice Exam - Rational		124
Syllabus		128

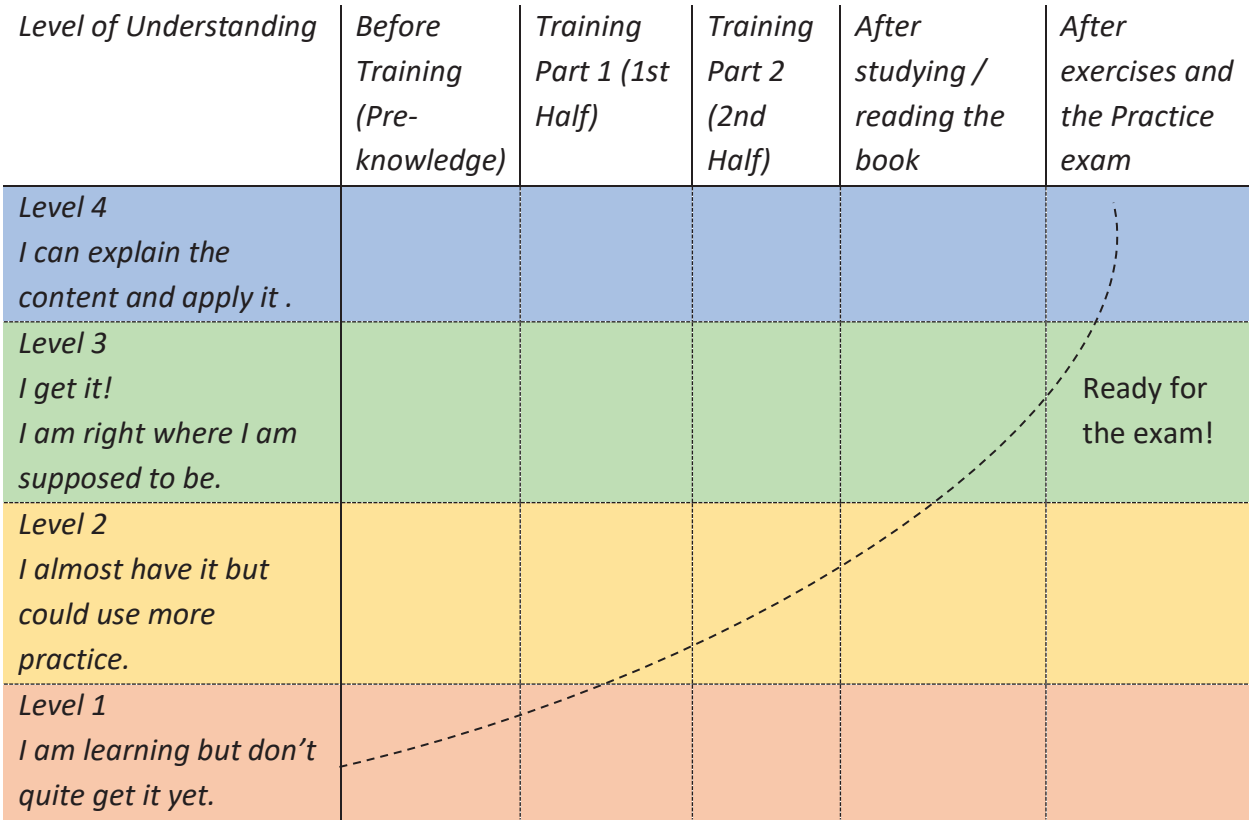
Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

Self-Reflection of understanding Diagram

'*What you do not measure, you cannot control*.'' – Tom Peters

Fill in this diagram to self-evaluate your understanding of the material. This is an evaluation of how well you know the material and how well you understand it. In order to pass the exam successfully you should be aiming to reach the higher end of Level 3. If you really want to become a pro, then you should be aiming for Level 4. Your overall level of understanding will naturally follow the learning curve. So, it's important to keep track of where you are at each point of the training and address any areas of difficulty.

Based on where you are within the Self-Reflection of Understanding diagram you can evaluate the progress of your own training.



(Self-Reflection of Understanding Diagram)

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

Write down the problem areas that you are still having difficulty with so that you can consolidate them yourself, or with your trainer. After you have had a look at these, then you should evaluate to see if you now have a better understanding of where you actually are on the learning curve.

Troubleshooting

Problem areas:	*Topic:*
Part 1	
Part 2	
You have gone through the book and studied.	
You have answered the questions and done the practice exam.	

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

Class objectives

Foundation:

Attendees:

- can work in a team that has adopted Kanban as a method for work delivery
- understand foundational Lean/Agile principles on which Kanban was developed
- can visualize their process and work on using a Kanban board
- are able to leverage Kanban to manage priorities, conflicts and opportunities in their work delivery process

Practitioner (all objectives in Foundation, and):

Attendees:

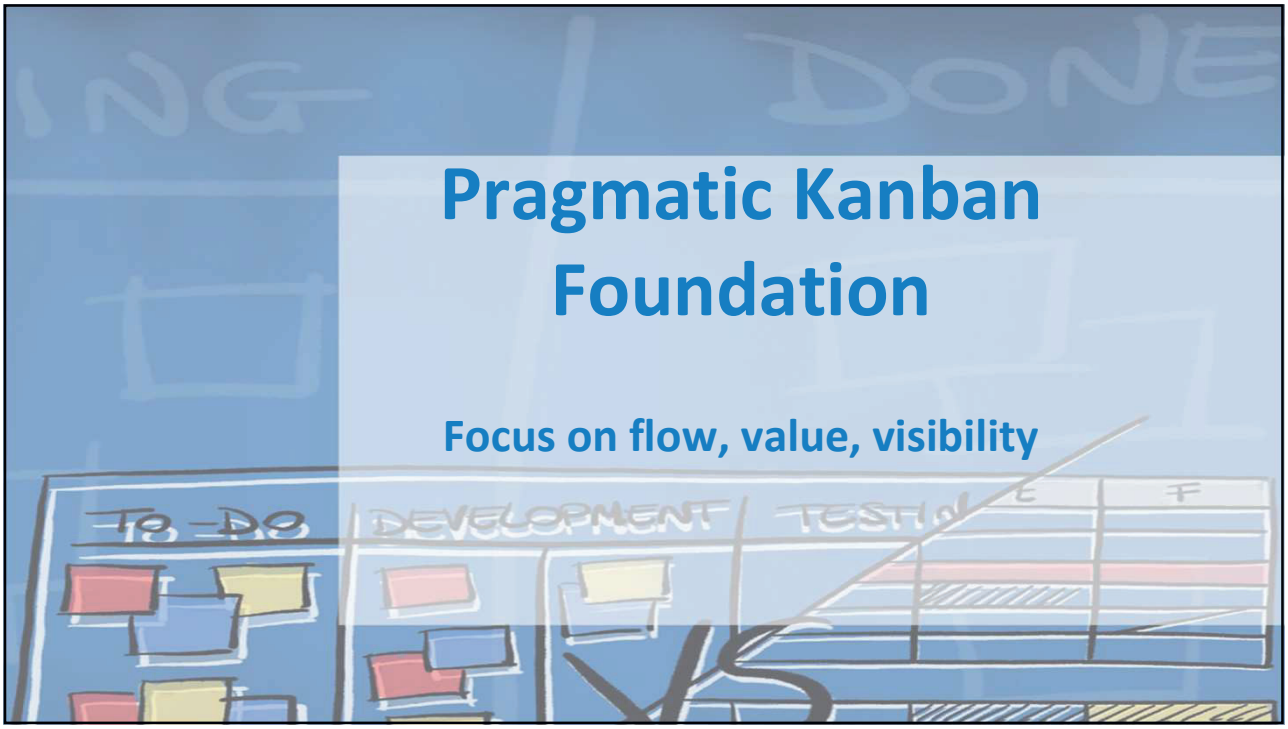
- can identify opportunities for improvement in their process
- can identify opportunities for radically improving time to market
- understand role-based scenarios when practicing Kanban
- understand how Kanban principles and practices can be applied with other methods (i.e. Scrum)
- can analyze and interpret data generated by their process and take action accordingly in order to improve delivery
- understand how to predictably forecast work and manage stakeholder expectations

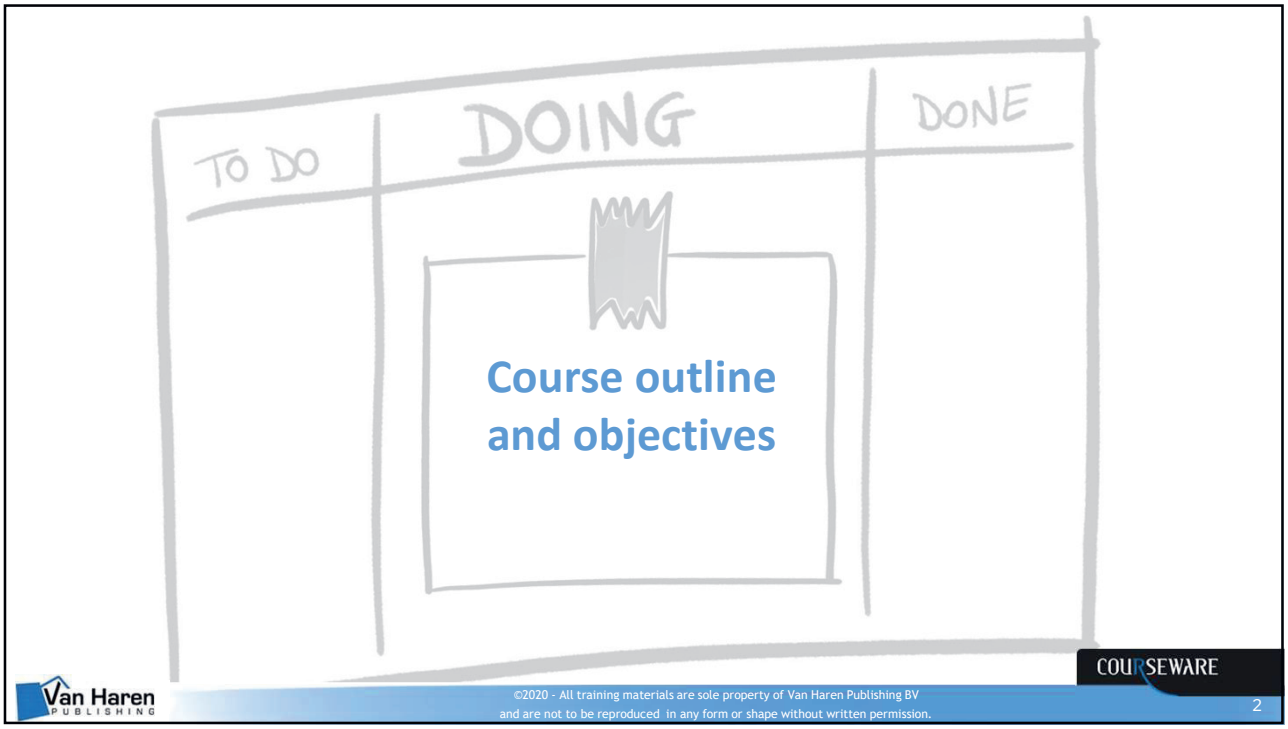
Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

Agenda

	Day 1
09.00	*Welcome & Introductions*
09.30	Introduction to Kanban Lean, Agile & Kanban • How do they relate and contrast? Kanban history, principles and practices Experiencing Kanban
11.00	*Break*
11.15	Team dynamics and behaviors Measuring for success
12.00	Visualizing your work with Kanban Analyzing work
12.30	*Lunch*
13.00	Visualizing your work with Kanban (continued) Using a Kanban board
14.30	*Break*
14.45	Kanban board designs Recurring work and repeating activities Dealing with ad hoc work
16.00	Meetings, events and cadences
17.00	*End of day 1*
	Day 2
09.00	*Recap and questions from day 1*
09.30	Improving Flow • Understanding bottlenecks Blockers and process exceptions Finding opportunities for improvement
11.00	*Break*
11.15	Predictable service delivery Understanding time to market and delivery speed Forecasting and planning Managing stakeholders with SLAs
12.30	*Lunch*
13.00	Predictable service delivery (continued)
14.00	Metrics and incremental improvements
14.45	*Break*
15.00	Scaling Lean/Agile delivery with Kanban
16.00	Wrap up and misc. topics
17.00	*End of day 2*

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net





Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

Course design

This course is designed to be interactive, practical and based on real life examples

We will use a case throughout the training that is created from years of experiences with teams and organizations. It captures common patterns, problems and dynamics that we will use to apply the theory and bring the materials to life.

© Van Haren Publishing

Course outline

1. Introduction to Kanban
2. Visualizing your work with Kanban
3. Meetings events and cadences
4. Improving flow
5. Metrics and incremental improvements
6. Predictable service delivery
7. Scaling Lean/Agile delivery with Kanban

© Van Haren Publishing

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

Course objectives

At the end of this class an attendee:

- can work in a team that has adopted Kanban as a method for work delivery in a knowledge work environment
- understand how Kanban principles and practices are applied for faster, more predictable delivery
- understand foundational Lean/Agile principles on which Kanban was developed
- can visualize their process, work, policies so the team can organize around it
- can identify opportunities for improvement in their process
- understand prioritization and forecasting mechanisms for predictable delivery
- can identify opportunities for radically improving time to market
- understand role-based scenarios when practicing Kanban
- understand how Kanban principles and practices can be applied with other methods (i.e. Scrum)
- can analyze and interpret data generated by their process and take action accordingly in order to improve delivery

© Van Haren Publishing

About the certification

Pragmatic Kanban Foundation Certification

- By **Pragmatic Learning**
- A **Pragmatic approach** and usage of Kanban
  - Applying theoretical **and practise**
  - **Adaptable by all** industries and participation levels
- Based on the '**Certify to Inspire**' program from the Agile Consortium

© Van Haren Publishing

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

About the exam

- **Independent**
- **Online** examination (Any-where & Any-time)
- **Optional** as part of the training

- **40 questions** in 45 minutes
- Passing rate **70%**
- **One try** per exam voucher

© Van Haren Publishing

Your learning objectives

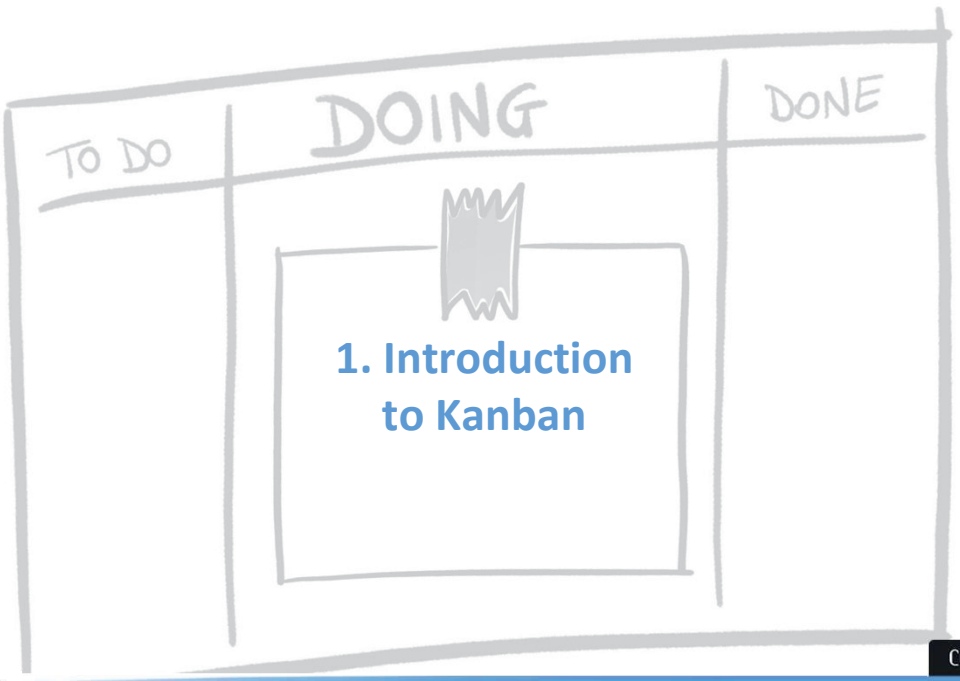
Write down 3 learning goals you have for this course.

Tip: Try to make them as concrete as possible i.e.: *In order to achieve [A] I want to understand [Y]*

1. _____
2. _____
3. _____

© Van Haren Publishing

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net



1. Introduction to Kanban

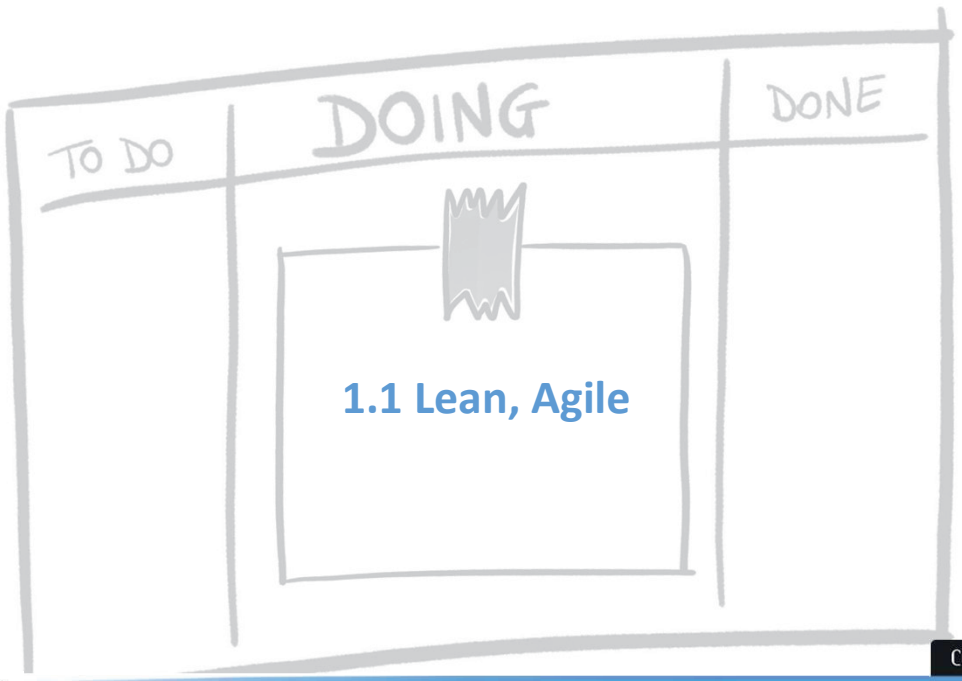
©2020 - All training materials are sole property of Van Haren Publishing BV
and are not to be reproduced in any form or shape without written permission.

Learning goals

- In this module you will learn:
  - to understand foundational Lean and Agile principles
  - differences and commonalities between Lean and Agile
  - to understand and experience Kanban principles and practices
  - emergent team behaviors with Kanban
  - about measuring for success and continuous improvement

© Van Haren Publishing

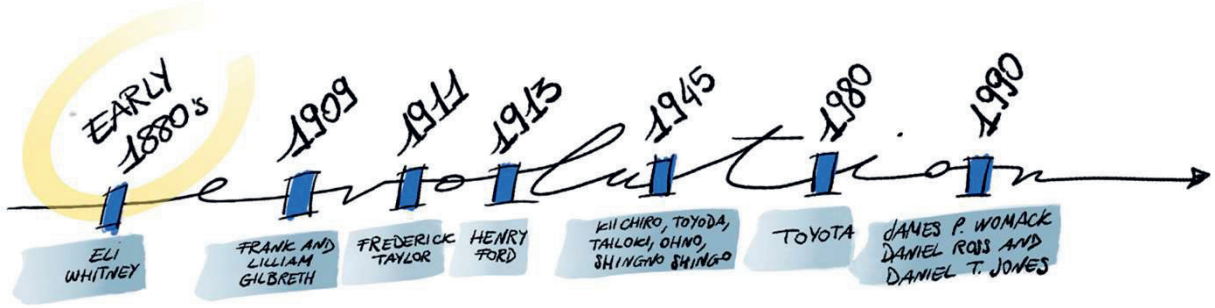
Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net



1.1 Lean, Agile

Van Haren PUBLISHING
COURSEWARE
©2020 - All training materials are sole property of Van Haren Publishing BV
and are not to be reproduced in any form or shape without written permission.

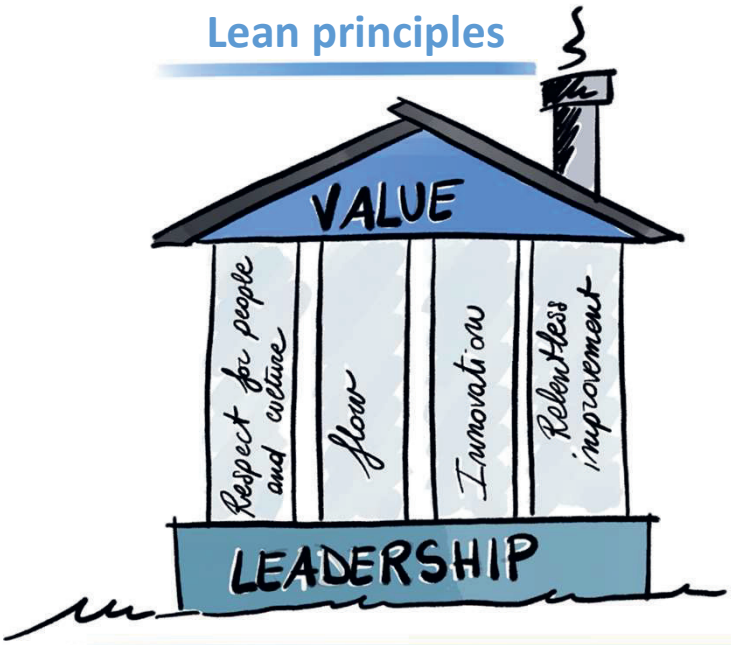
Lean, a brief history



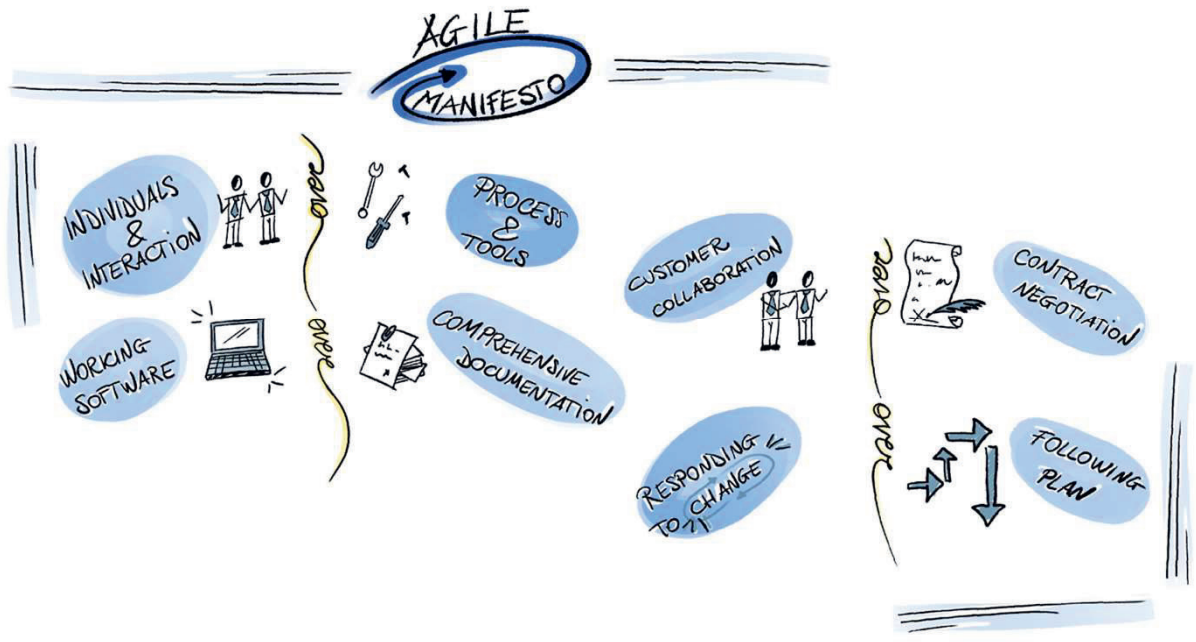
© Van Haren Publishing

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

Lean principles



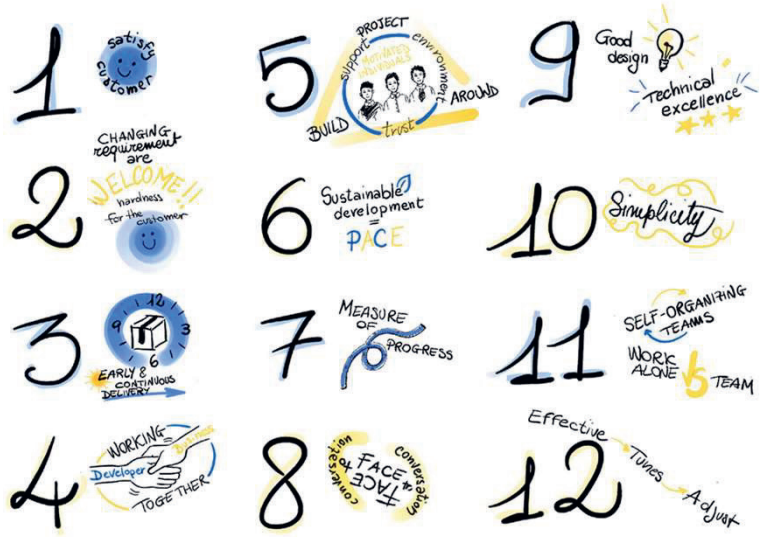
© Van Haren Publishing



© Van Haren Publishing

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

Principles behind the manifesto



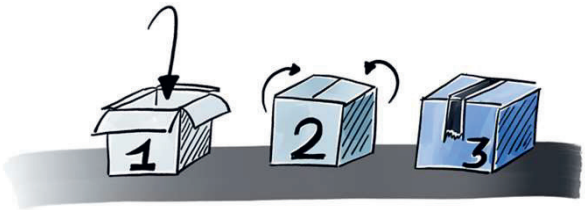
Knowledge work vs production work

Knowledge work

- Decisions made by the worker
- Several “good practices” can be chosen to reach optimal outcome
- ”Good practice” is highly dependent on context
- Majority of the process is IN the head of the worker
- Flow of work might not be linear

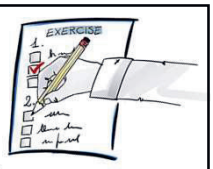
Production / manufacturing work

- Significant efficiency improvements possible at scale
- ”best” practices for delivering work exist
- Flow and process of work is easily observable



Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net

Exercise: Lean or Agile



For each statement, would you choose a Lean or Agile development approach?

1. Producing office chairs
2. Creating the office chair of the future
3. Resolving a production outage in our customer portal
4. Building a new function in our mobile app
5. Resolving customer complaints in the customer service department (like: reactivating credit cards)

© Van Haren Publishing

The Difference Between Lean and Agile

The Difference Between Lean and Agile

© Van Haren Publishing

Copyright protected. Use is for Single Users only via a VHP Approved License.
For information and printed versions please see www.vanharen.net