# Lean IT, certification LITA Lean IT Foundation

## *Introduction*

Le terme lean (de l'anglais lean, « maigre ») sert à qualifier une méthode de gestion de la production qui se concentre sur la « gestion sans gaspillage ».

Cette formation permet aux organisations informatiques de s'assurer qu'elles fournissent à leurs clients[1] les meilleurs services possibles. Pratiquer le Lean Management, c'est utiliser à leur optimum toutes les ressources. Ce système englobe toutes les techniques préconisées jusqu'ici pour rendre les entreprises ou les services performants. Le Lean IT est complémentaire à toutes les autres méthodes de meilleures pratiques.

La formation prépare également à l'examen de certification « LITA Lean IT Foundation » de LITA (Lean IT Association), d'une durée de 60 minutes, composé de 40 questions à choix multiple en anglais. Il se déroule en fin d'après-midi du dernier jour de cours dans nos locaux ou un jeudi à convenir.

## *Pour qui*

- Manager IT ou informaticien souhaitant acquérir des connaissances et une compréhension suffisante du Lean IT pour démarrer une initiative Lean dans son organisation IT.

## *Objectifs*

- Comprendre les principes de base de la philosophie du Lean.
- Comprendre l'importance de la fourniture de valeur aux clients.
- La manière dont le Lean aborde les processus et leurs gaspillages.
- Comprendre comment mesurer la performance avec ses critères de mesure.
- Comprendre les exigences organisationnelles nécessaires lors de l'implémentation du Lean avec ses outils de management visuels.
- Connaître le comportement et l'attitude à adopter pour assurer le succès lors de l'introduction du Lean dans une organisation IT.
- Connaître le modèle de résolution de problèmes DMAIC.
- Connaître les principes Lean pouvant être appliqués dans une organisation IT.
- Se préparer à l'examen de certification « LITA Lean IT Foundation ».

## *Prérequis*

- Avoir un intérêt dans la mise en place d'une initiative Lean dans son organisation IT.
- Connaissance de l'anglais technique, une partie de la documentation pédagogique étant en anglais ainsi que l'examen de certification.

## *Programme*

1. Know the historical development of Lean, the key principles underlying Lean and the dimensions for structuring Lean IT.
1.1. The historical development of Lean and the importance of the Toyota Production System.
1.2. The key principles underlying Lean: customer value, value stream, flow, pull, perfection.
1.3. The concepts of waste (muda), variability (mura) and overburden (muri).
1.4. Classification of activities: Value-Add, Necessary Non-Value-Add, Non-Value-Add, particularly as related to specific IT activities like solving incidents, developing applications, testing.
1.5. Plan-Do-Check-Act cycle as the generic method for quality.
1.6. Definition of Lean IT (Lean IT Association definition).
1.7. Dimensions of Lean IT: Customer, Process, Performance, Organization and Behavior & Attitude.
1.8. Key 'players': Shingo Prize (show high level model and explain), Lean IT Association, author community.
2. Understand the following aspects dealt with in the Introduction.

2.1. Lean principles: how these are related to one another.
2.2. Waste: ability to identify types of waste within an IT organization or process (TIMWOOD with Talent).
2.3. The cost of poor quality and reasons for using Lean Principles to improve performance.
2.4. Types of activities: ability to define what IT activities fall into which category.
2.5. PDCA: ability to describe how the PDCA cycle works on the most basic level.
2.6. Relationship to other models and methods used within IT: understand where Lean IT differs from and complements other methods. The connection of Lean IT with IT service management is specifically investigated.
3. Know the key components of the Customer dimension.
3.1. Voice of the Customer (VoC) and the types of customers.
3.2. Types of customer value.
3.3. The concept of Critical to Quality (CTQ).
3.4. Ways to analyze the Voice of the Customer.
3.5. Sources of continuous improvement opportunities: Voice of the Customer,

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Page 1/2

Voice of Business, Voice of the Process, Voice of the Regulator.

4. Understand the following aspects related to the Customer.
4.1. Types of customer value and the factors that influence customer value.
4.2. Link between Voice of the Customer and Critical to Quality.
4.3. How to construct a Critical to Quality tree.
5. Know the key aspects of the Process dimension.
5.1. Definition of process and the basic processes in an organization.
5.2. Key components of a process: goal, result, input, throughput, output, customer.
5.3. The concepts of Push and Pull, including justifiable inventory to ensure reduction of variation.
5.4. The definitions of the SIPOC model.
5.5. The key aspects of a Value Stream Map (VSM), including the identification of waste in the VSM and adding metrics to the VSM.
5.6. The most important metrics in a process: Cycle time,Takt time, Lead time, Waiting time, Changeover time, Work in Progress, Parallel Lines, Throughput, Capacity.
5.7. Value improvement in processes: possible sources of improvements including specifically heijunka and 5S.
5.8. The concepts of value demand and failure demand and the related value and failure streams.
6. Understand the next aspects of the Process dimension.
6.1. Relationship of process (Value stream) with the other Lean principles.
6.2. The difference between Push and Pull systems.
6.3. The steps for creating a Value Stream Map, using SIPOC and Value Stream Map.
6.4. Waste in a Value Stream Map, ability to identify the symbols for the TIMWOOD waste.
6.5. Explain the SIPOC and VSM using IT examples e.g. SIPOC: Software development, VSM: High level.
6.6. Change process (other examples are permitted).
6.7. The difference between value and failure demand within IT.
7. Know the key aspects of the Performance dimension.
7.1. Definition of performance, as compared to a result.
7.2. Definition and requirements for a key performance indicator (KPI).
7.3. The concept of Process Cycle Efficiency (PCE) as a method for understanding time usage. Importance of time in an IT organization.
7.4. The goal of understanding the availability of skills and knowledge.
7.5. The combination of Performance indicators, Time and Skills & Knowledge to steer performance.
8. Understand the following aspects of the Performance dimension.
8.1. Relationship of performance with the PDCA cycle.
8.2. The key aspects of a KPI.
8.3. Why time is the most important production factor within IT.
8.4. The relationship of PCE with VSM.
8.5. The role of skills and knowledge in ensuring performance.
9. Know the key aspects of the Organization dimension.
9.1. Organizational requirements for Lean IT structuring for customer orientation, empowerment of frontline to act in

delivery of value to customers and speed of communication through the organization.
9.2. The principle for organizing: customer orientation and speed of communication.
9.3. Goal of management to empower employees.
9.4. Concept and components of the performance dialogue.
9.5. Concept and goals of visual management including use of boards (day, week and Kaizen/improvement).
9.6. Explain the concept of Kanban and its role in visual management.
10. Understand the following aspects of the Org. dimension.
10.1. Why organizations need to be customer-oriented.
10.2. What the goal is of a performance dialogue.
10.3. The use of each of the visual management boards – day board, week board and Kaizen/improvement board.
11. Know the key aspects of the Behavior & Attitude.
11.1. Characteristics of the Lean mindset, Empowerment of the individual to stop the production line (Jidoka/Andon).
11.2. Types of Lean behavior, Quality at the source (First Time Right).
11.3. The role of managers within a Lean environment – role in welcoming problems.
11.4. Lean Leadership – Go See, Ask Why, Show Respect. Go to the Gemba as concept for Go See.
11.5. Valley of despair in relation to people's expectations over time (Kubler-Ross).
12. Understand the following aspects of the Behavior & Attitude dimension.
12.1. The difference between behavior and attitude.
12.2. The difference between traditional management and Lean management.
12.3. The behavior and attitude required for successful use of Lean.
12.4. Behavior and Attitude in relation to expectations surrounding a change in way of working.
13. Know the key aspects of Problem Solving / Kaizen.
13.1. Definition of Kaizen and Kaikaku as the two forms of improvement within Lean (continuous and step).
13.2. Overview of steps in the DMAIC method.
13.3. Define phase: Definition of a problem.
13.4. Measure phase: Definition of a Pareto chart and its use.
13.5. Analyze: Definition of an Ishikawa (Fishbone) diagram and its use.
13.6. Analyze phase: 5 Why method for root cause analysis.
13.7. Improve phase: inputs for future state: VoC (Voice of the Customer), VoB (Voice of the Business), VoP (Voice of the Process), VoR (Voice of the Regulator).
13.8. Control phase: explain Poka Yoke as a way to stop mistakes from happening, use examples e.g. checklists.
13.9. A3 method.
14. Understand the following aspects of Problem Solving/Kaizen.
14.1. Which tools from the other dimensions are used in which phase of the DMAIC cycle.
14.2. Prioritization of improvement candidates through feasibility and impact in determining both which problems to solve with a Kaizen and which solutions to implement at the Improve step of the Kaizen.

## *Durée et prix*

| Formation | Jours | Dates | CHF | CHF/j |
|---|---|---|---|---|
| Lean IT, certification LITA Lean IT Foundation | 2 | iseig.ch | 1'500.- | 750.- |
| Examen de certification LITA Lean IT Foundation | 60 min. | iseig.ch | 240.- | n/a |

Voir conditions générales sur iseig.ch. Sauf indication contraire, le cours se déroule de 9h00 à 12h00 et de 13h30 à 17h00.

Selon notre expérience, la réussite de l'examen implique en plus du cours et des exercices dirigés, un travail personnel d'assimilation conséquent dont la charge est estimée à 2 jours par jour de cours.

Le prix du cours comprend toute la documentation distribuée. Il ne comprend pas le prix de l'examen.

La formation n'est pas soumise à la TVA.

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Page 2/2