

# DESIGN THINKING AND LEAN INNOVATION INTRODUCTION

#### **Course Descriptions**

Learn how to combine Systems Engineering with Design Thinking and Lean Start-up in the upfront Innovation phase (Pre-Development-Phase). The Design Thinking course gives you a deep understanding of the Design Thinking mindset and its problem-solving cycle based on fast iteration and customer interaction.

The importance of a well-defined concept including product/service conception, business design and clear determination of the customer needs is fundamental before the development starts. The later misconceptions are discovered, the more costly it gets and there is a lot of wasted work, money and time.

Design Thinking and Systems Engineering are both problem-solving methods that try to cope with the increasing complexity. Both approaches are on a first sight completely different but on a closer look they become more and more complementary and share many thoughts. Combining both approaches and switching the thinking mode is essential when dealing with ambiguity.

The course is very practice-oriented and hands-on. The participants will spend more

than half of the time practicing, e.g. meeting the user and practicing need-finding, creating new ideas, building prototypes and testing with the user.

#### Learning Outcomes

• Understand the basics of Design Thinking and Lean Innovation

• Know how to combine Design Thinking and Systems Thinking and when to switch thinking modes

• Apply to tools to determine the customer needs and carry out need-finding

• Build and test different types of low-resolution prototypes (e.g. Critical Experience or Dark Horse prototype) with the user and improve your understanding of the situation

- Use the Lean Canvas to summarize the findings and to improve it iteratively
- Practice Design Thinking and Lean Innovation on a practical challenge during the three days.

• Reflect and transfer the learnings into your daily business and own projects

## Who Should Attend?

• Managers and engineers who would like to enrich their problem solving competences with user-centric and agile approaches

- Managers who are looking for ways to create radical innovations
- Managers who would drive the digital transformation in their area

• Anyone who is responsible to create new products, services, business models and would like to integrate design oriented methods

## **Course Rates**

Early Bird Rates: 1,350 CHF. Regular Rates: 1,500 CHF

## Duration

2 days

**Delivered By** 



Patrick Link

Since 2009 Patrick is Professor for Product Innovation in the study program "Industrial Engineering|Innovation" at the Lucerne University of Applied Sciences and Arts(LUASA) School of Engineering and Architecture.

He studied Mechanical Engineering and got his doctorate in the field of innovation management at the BWI ETH Zurich. After that, he worked for Siemens in various positions. His research and teaching interest are in the field of agile product management, Design Thinking and Entrepreneurship and the combination of these approaches, for example Design Thinking, Systems Thinking and Data Analytics. Together with Larry Leifer from Stanford University and Michael Lewrick from Swisscom, he is the Co-editor of the book "Das Design Thinking Playbook"