3-day Course in Lean Systems Thinking for Service-Based Systems

Course Description

Systems Thinking is seen as <u>the</u> approach to handling the complexity and risks associated with business problems and opportunities in the modern world. The adoption of Systems Thinking provides a very powerful framework for understanding business situations and issues, leading ultimately to their resolution. Its applicability is universal, from designing a new product or service through to root cause analysis of problems, change management and business transformation and the exploration and evolution of future strategies.

Service-based systems offer their own peculiarities as being process intensive, they frequently suffer from the issues of inventory, flow, repeatability and quality. "Lean" is often presented as the solution to these ills. However, often misunderstood and incorrectly implemented, Lean has frequently failed to deliver the rewards it advertises.

Developed independently, the consilience of Lean and Systems Thinking realises an approach that not only provides a sound theoretical basis for Lean but also its critical success factors that are often overlooked. Furthermore, the principles of Lean extend and introduce new concepts within Systems Thinking. Indeed, Lean is not just about waste removal, but the consideration of flow, stocks, purpose and context. Together, Lean and Systems Thinking give the profound understanding that is necessary for the improvement of existing systems and the design of new ones.

Applying Lean Systems Thinking, however, requires not only skills and knowledge but also a deep understanding of the underlying systems and Lean principles. It is as much about mind-set as is it is about process and tools. Education and training are therefore critical to the development of an organizational capability in Lean Systems Thinking. This course aims to educate and train participants in how to practically apply Lean Systems Thinking to service-based systems.

Course Numbers and Who Should Attend?

The course has been designed for minimum numbers of 8 and maximum of 16. This course applies to anybody involved in the improvement or design of service-based systems.

Benefits to the Individual and Business

During an intensive three days of teaching and practical 'hands on' exercises, participants will be challenged to develop the skills and mindset that can be applied to any situation irrespective of context.

At the end of the course participants will:
- Have an understanding of the concepts and principles of Systems Thinking and how it can be applied through the appropriate blend of people, process and tools.
- Be able to think about problems and opportunities in a new and exciting way.
- Be provided with a common language and approach to addressing complexity.
- Understand Lean from a systems perspective, in particular understanding the importance of stocks.
- Be able to use a number of systems tools in a systematic fashion to analyse complex situations and address problems and opportunities in a logical evidence-based fashion.

BURGE HUGHES WALSH LIMITED
First Floor, 6 Allerton Road
Rugby, Warwickshire CV23 0PA

Email: enquiries@burgehugheswalsh.co.uk
Web: www.burgehugheswalsh.co.uk
Phone: 01788 550015

Learning Approach

The learning approach is based on the Kolb learning cycle with a significant proportion of the course set aside for exercises to reinforce the learning. Indeed, many of the small group exercises involve a case study that provides a practical focus for the course and enables the delegates to practise the methodology and tools presented.

Course Content

Day 1	Day 2	Day 3
Introduction and Delegate expectations Simulation of a service intensive system Systems, Systems Thinking and Systems Approaches Why Systems Thinking? - Emergence – desirable and undesirable What is a system? System Purpose System Context System Boundary Subsystems and super-systems Events, patterns and behaviour - Balancing feedback - Reinforcing feedback - System stability - System Stock and Flows - Variation System simulation of the effect of stocks and flows on system performance - The evil of batching - Smoothing flow - Managing bottlenecks - Managing variety	Day 1 Review Doing Systems Thinking - Divergent and Convergent Thinking - Spray Diagram - Multiple Cause Diagram/Causal Loop Diagram Systems Thinking in Practice - Hard and Soft Systems Methodologies - Unified Systems Methodology - Systems Thinking Tools The Systems Thinking Tool Box Tools for understanding purpose 18 Word Statement - Tree Diagram - Quad of Aims - Root Definition Tools for understanding Context - Context Diagram - Rich Picture	Day 1 and 2 Review Tools for understanding what's inside and what's outside - Systems Map - Input-Output Analysis Tools for Understanding Systems Structure - Influence Diagram N^2 Analysis - Matrix Diagram - Conceptual Model Tools for understanding System Behaviour - Sequence Diagram - Function Flow Diagram - Graphical Analysis Tools for change - Systems Waste Map - Morphological Analysis - Paired comparison - Decision matrix Using Systems Thinking - Fixing Broken Systems - Designing Systems Simulation of the full application of Lean Systems Thinking Summary and Close

Course Costs

The cost of delivering the 3-day course, excluding delivery tutor accommodation and expenses, but including all courseware is £5,000. VAT will apply at the prevailing rate.

The course can be tailored to suit individual customer's operations.

More Information and Contact Details

For more information about the 3-day Lean Systems Thinking Course or any of our other Systems Thinking course please contact **Dr Stuart Burge** on +44 (0) 7803 131614 or sburge@burgehugheswalsh.co.uk.