LEAN LABORATORY MANAGEMENT

FOR SENIOR AND MIDDLE LEVEL MANAGERS FROM LABORATORIES OF ANY TYPE AND SIZE

7-8 July 2015 - Malta

COURSE TIMETABLE

DAY 1 - MORNING

- The key to *World-Class Performance*: ***Lean Thinking***. What does *Lean Thinking* mean.
- The scenario: the world has changed - the environmental change must be understood and managed effectively.
- The pre-requisites for *World-Class Performance*: a) be prepared to abandon the "formula" – b) have a clear "direction" and ensure effective communication: "let people know where you are going to…." - c) get there: by deploying "lean" tools.
- Why many private enterprises and public/semi-public organisations don't "perform": the root causes of poor performance date back to over 2 centuries ago. We have gone into the 21st century, with enterprises designed in the 18th and 19th centuries to perform well in the 20th…. Is our Industrial DNA still polluted by those obsolete principles that gave birth to the first Industrial Revolution? Case studies.
- The origins of *Lean Thinking* - 1. **Remember**! No matter what your business is – *you must generate value for your customers!*
- The origins of Lean Thinking - 2. **Remember**! Everyone that works in your organization is doing one of three things: **a)** They are generating value for your customers – or, **b)** They are creating or reshuffling waste – or, **c)** They are doing absolutely nothing. *The market leaders will always have the majority of their people dedicated to the first of these.*
- ***Value Adding Management*** in Industry: the pilot light and driving philosophy for the new millennium. Focusing on processes to maximise *value* and eliminate *waste*. Today's relationship between *value*, *productivity*, and *quality*. How to "re-engineer" an organisation or a department for generating high levels of output *value*.
- Process' ***Time and Cost Analysis*** : identifying *value-adding* and *non-value-adding* activities - Case studies: "spot the waste!" ***Systematic Elimination of Waste*** in industry. What is *waste* : classification of *waste*. Halting *waste* proliferation - Reducing *waste* - Eliminating *waste.* Case studies. The target: ***Flow Process***, or processing with no *waste.*

DAY 1 - AFTERNOON

- Deploying *Value Adding Management* Principles in a Laboratory: identifying *value-adding* and *non-value-adding* activities. Movie time: "spot the waste in laboratory's activities!"
- Classification of ***Waste*** in any Laboratory: the visible and invisible types of Waste. ***Visible Waste***: un-necessary idling, walking, talking, moving, searching, handling, clarifying, instructing, supervising….. ***Invisible Waste***: making errors and mistakes, fixing errors and mistakes, doing un-necessary paper-work, following un-necessary/redundant procedures, misunderstandings of any sort, wrong/un-necessary/redundant data entries, misfiling, un-necessary filing…….. and lost opportunities, lost talents……
- ***Lean Thinking*** comes to the rescue: maximise value-adding while reducing processing waste.
- The role of "Lean" disciplines in obtaining higher levels of performance.
- The 5 Core Concepts of *Lean Thinking*: 1) ***Value*** (as defined/perceivable by the customer) 2) ***Value Stream*** (the way Value is produced and delivered) 3) ***Flow*** (internal: Organisation-side, and external: Customer-side) 4) ***Pull*** (the *Value Stream* must flow pulled by Customers) 5) ***Excellence*** (the continuous improvement of a *Lean Organisation*)
- *Lean Thinking* preliminary targets: reduce the steps by half - reduce the time by half - reduce the errors by half. *Lean Thinking* subsequent targets: cut the steps to *Value-Adding* only - cut the time to *Value-Adding-time* only – ***zero defects***.
- The resistance and opposition thinking to the *Lean* transition: the table of excuses – the "batch" mentality – the "push" mindset – the "conveyor" mentality. How to overcome resistance and reluctance. Case studies.

DAY 2 - MORNING

- The ***5S*** approach as a starting point - Halting *waste* proliferation - Reducing *waste* - Eliminating *waste.* Case studies. 5S and non-5S Labs: "spot the difference!"
- Lessons learnt from ***Lean Manufacturing***: *One-Piece Flow* vs. *Batch Production.* Converting the *One-Piece-Flow* principle for use in a Lab environment. The result: multi-skill/multi-function activities performed in a ***Cell*** style.

- Lessons learnt from ***Lean Quality Management***: ***Poka-Yoke***, or mistake-proofing of processes and activities. Poka-Yoke for effective Health and Safety in Laboratories.
- *Lean Thinking* - the old and new ***tools*** for seeing and eliminating waste: Time Observation – loading Bar Charts - the 5W2H approach – the 5Why method – the TAKT-time principle – Communication Circles – Process and Value Stream Mapping – Spaghetti Diagram – Flow Charting. Practical exercising and case studies on Spaghetti Diagrams in Laboratories. The core tool: *Creative Thinking*.
- Lessons learnt from ***Lean Project Management***: the ***Last-Planner*** approach and the ***5-Why Analysis***. Why all Laboratory Personnel should become Last Planners and assure max. efficiency/effectiveness in own work.

DAY 2 - AFTERNOON

- ***Lean Thinking*** and ***Excellence***. The approach to continuous performance improvement *Lean*-style throughout a Lab: ***Lean Kaizen***. Pre-requisites, limitations, constraints. Why it may fail. How to make it successful. Modern continuous improvement strategies under the *Lean Thinking* umbrella: direction, strategy, brain-power, poor-man approach, tools, techniques, team-work. Why everybody in a Lab should be involved in *Lean Kaizen* practices.
- The **Lean Project** in a Laboratory. Identifying the most appropriate person to act as ***Lean Project Manager***. Preparing a ***Lean Master Plan*** for short-, medium- and long-term lean initiatives. Setting Milestones. Preventing failures.
- ***Lean Thinking*** and ***People***. How to insert people in value-generating processes. Making people understand the difference between single-skill/single-function activities (tasks) and ***multi-skill/multi-function*** process management. How to switch over from simple tasks to simple processes. Case study. How to evolve from "*job description*" to "***process description***".
- The new roles of Quality Assurance/Control and Laboratory Managers: Coaching, Sustaining, Re-skilling people, Technical Training for multi-skilling, Elimination of redundant procedures, Simplification of procedures, Poka-Yoke practicing as a Lab-wide rule.
- ***Thinking***. The ultimate resource. The main differences between old-world traditional, automated thinking and new-world proactive and creative thinking. The ***Second Industrial Revolution***.

This course is very interactive and supplemented with abundant practical exercises and case studies.

For further, comprehensive details, please visit
http://www.scodanibbio.com/malta2015/