

**Venue: Protea Hotel,  
Livingstone**

**5 Day Workshop**

*A World Class Performance*

# LEAN PROJECT MANAGEMENT LEAN CONSTRUCTION MANAGEMENT

*what has to be changed in traditional Project and Construction Management to tackle the challenges of the years 2000s!*

*“Lean Project Management is ‘lean’  
because it provides a way to do more with less  
while coming closer to providing customers with exactly what they want”*

## Course Program

### DAY 1

- **“Traditional” Project Management:** overview of basics concepts and core principles:
  - ❖ What is a Project
  - ❖ The 3 core parameters of a project
  - ❖ The integration of Planning and Control
  - ❖ The role of the Project Manager
  - ❖ Symptoms of Projects lacking adequate Management and likely causes
  - ❖ The traditional “matrix” organizational structure in projects. “Matrix Structures” vs. “Task Forces”: pro’s and con’s
  - ❖ The traditional organization of Project Teams
  - ❖ The main Project actors: Proposal Manager, Project Manager, Project Engineer, Project Controller, Contract Manager, Site Manager, Site Foreman, etc.
  - ❖ The flexibility factor – Responsibilities: integration vs. distribution
  - ❖ Planning, Scheduling, Controlling Projects
  - ❖ Why Planning – how to plan a project
  - ❖ **Team Exercising.** Traditional Planning: spot the weaknesses!
  - ❖ Bar Charts and Gantt Diagrams: pro’s and con’s
  - ❖ The traditional PBS (Project Breakdown Structure) and WBS (Works Breakdown Structures).
  - ❖ PERT and CPM - basics
  - ❖ The Project Program – Gantt Diagrams and Project Planning Software: the risks, the precautions.



## DAY 2

- **“Traditional” Project Management:** overview of basics concepts and core principles (continued):
  - ❖ Project Risk Management. Basic Principles. The Techniques. How to avoid the bureaucratic
  - ❖ approach and rather instil a “risk-conscious” mentality in all those concerned
  - ❖ Project Cost Control – The “S” curve – The “Earned Value” approach: pro’s, con’s and limitations
  - ❖ Project Financial Control (basics)
  - ❖ **Team Exercising:** Project Financial Control.
  - ❖ Project Resources Management. Engineering Management. Procurement Management. Construction Management. Site Management. Plant Management. Site Facilities Management.
  - ❖ “Traditional” Contract Management: the weak points.

## DAY 3

- Analysis of the weaknesses and failures in Traditional Project Management: why many private project-driven 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.
- ...then, the world changed.... **the scenario** - the environmental change must be understood and managed effectively.
- Today’s key to World-Class Performance in all Industrial Sectors: **Lean Thinking and Lean Management.**
- The origins of Lean Thinking –
  1. **Remember!** Irrespective of whether you fish it, you farm it, you breed it, you mine it, you manufacture it, you mill it, you brew it, you construct it, you simply sell it, or you dance it or sing it.... no matter what you do – *you must generate value for your customers!*
  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.*
- The 5 Core Concepts of Lean Thinking:
  - 1) **Value** (as defined/perceivable by the customer)



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- 2) **Value Stream** (the way Value is produced and delivered)
  - 3) **Flow** (internal: Organization -side, and external: Customer-side)
  - 4) **Pull** (the *Value Stream* must flow pulled by the Market)
  - 5) **Excellence** (the continuous improvement of a *Lean Organisation*)
- The integration of the **Value Adding Management** discipline with traditional Project Management - impact and implications. Value Adding Management in Industry: the pilot light and driving philosophy for the new millennium. Focusing on processes to maximize value and eliminate waste. Today's relationship between value, productivity, and quality. How to "re-engineer" a project-driven organization for generating high levels of output value.
  - *The origins of Lean Thinking:*
    3. **Lean Manufacturing and Flow Production** - The "lot" issue in Manufacturing. The **small-lot** production systems: the smaller the lot, the less the waste! Case study: *One-Piece Flow vs. Batch Production*
  - The conversion of *Lean manufacturing* principles for deployment in other Industries. The implementation of the one-piece-flow principles in the Project-Driven/Construction Industries. The result: **Lean Project Management** and **Lean Construction Management**.
  - What is a *Lean Project and Lean Project Management*? Where does waste hide in traditional projects - how to identify it - how to reduce it drastically? How to plan project's processes for lean implementation - the role of creativity in planning - *flow project processes*.
  - *Lean Project Management* and 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. The core tool: Creative Thinking.

## DAY 4

- The secret of **Lean Project Management: Lean Planning** - workshop and case studies. The concept of the **Last Planner**: how to eliminate all waste in Project/Contract works.
- **Team Exercising**: Last Planning in action.
- How to conceive "*realistic assignments*" – how to plan them – how to assure a high PPC (Percent Plan Complete) – how to improve the PPC even further.
- *Lean Project Management* in multi-projects situations: the TOC (*Theory of Constraints*) approach to Lean management of several projects at once. Workshop. Identifying the "*critical chain*" – introducing "*buffers*" – identifying the "*drum resource*". The final results: all projects early instead of all projects late!
- *Lean Project Management* in **Engineering, Design and Architectural works** – practical principles for Engineering and Project Management Companies.



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- *Lean Project Management* in the **Public Sector** – practical principles and case studies.
- *Lean Project Management* in **Developing New Products and Services** – the “Concurrent Engineering” against the “over-the-wall” approach – practical principles for the Manufacturers, Banks and the Service Industry in general.
- *Lean Project Management* in **Software Development** – practical principles. *Lean Thinking* and the IT world. What has gone wrong in the IT sector and how it should be reviewed to cater for *Lean*?
- *Lean Project Management* in **multi-disciplinary “turn-key” projects**: the integration of suppliers and sub-contractors in the “lean value chain”. The **Lean Supply Chain**: new horizons for Procurement and Contract Management. *Comakership*: the present and the future.

**DAY 5**

- **Lean Construction Management**: basic principles, hints and tips.
- **Lean Construction Management, Plant and Equipment**. Industrial competitiveness today is based on the motto: "Methods first, then Technology". What are the modern principles of Plant, Equipment and Machinery Management under the *Lean* angle of view? How to prevent major technological mistakes (the "super-star-galactica" cul-de-sac....). What machines are really suited for “lean construction” and what are not? How to harmonize People and Machines in a productive system geared to produce high levels of *added-value*. How **TPM - Total Productive Maintenance** principles can be beneficially deployed not only in the *Manufacturing*, but also in the *Project/Construction Industries*. Case studies.
- **Lean Contract Management**: basic principles – the new role of the Contract Manager. How to maximize value to the Client while assuring best results for the Enterprise.
- **Lean Project Management** and **Quality**: ...eventually, the dust settled. What is **TQM** today, what is different from 10 and 15 years ago? Today's core principles of **Total Quality Management** in a *Lean* environment. The relationship between **Quality Assurance** and **Total Quality Management**. Is the *ISO Quality Assurance* system or similar really beneficial? When should an enterprise go "top-down" *ISO* style, and when should it go "bottom-up", **kaizen** style? Can the 2 approaches be combined? How to harmonize a *Quality Assurance System* to *ISO* standards with a *TQM System* targeting at eliminating all defects and opening the door to lean processes. The “turn-this-board” strategy.
- **Poka-Yoke** (mistake-proofing) tools for Lean Construction and **zero defects** – workshop.
- **Lean Thinking vs. 6-Sigma Methodologies**: case studies. Can the “Lean” and the 6-Sigma approaches be beneficially combined? Can 6-Sigma be part of a greater approach to Performance Improvement?



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- **Lean Risk Management** vs. traditional *Risk Management*: the benefits.
- **Lean Project Management** and **People**. A new breed of people is required in the modern project driven industry - the "multi-skill" and "multi-function" factors - the "empowerment" factor – self planning self-control. Should everybody be a “*last planner*”?
- **Case Study**: a World-Class Project-Driven Enterprise. The secret of success.
- **Lean Project Management** and **Thinking**. Why Creative, Lean Thinking is essential in all Project- Driven situations. **Team Exercising**.
- The demolition of Adam Smith's principles and the **Second Industrial Revolution** in the Project driven Industry.

***This course is very interactive and supplemented with abundant practical exercises and case studies. This course is equally beneficial for all Industrial Project-Driven Sectors (Project/Construction – Engineering – Design - Development) and for Public/Governmental and semi-Public Bodies and Institutions active in Project works.***

***Who should attend?***

Business Strategists - Chief Executive Officers – Managing Directors – General Managers – High and midlevel Managers (Operations, Project, New Project, Contract, Production, Quality, R&D, Engineering, Contract....) from private project-driven enterprises (project management companies – engineering/architectural companies – construction companies, turn-key companies – electrical, mechanical, air-conditioning, piping, etc. contractors – shop-fitters, interior/exterior decorators, landscaping contractors – developers – banks, service establishments – mining enterprises – special machinery manufacturers – software houses – and the like) of all sizes; and key personnel from public/governmental organisations and institutions active in public project works of any nature (civil construction, roads, railways, electrical distribution, municipal services, agricultural development, etc.).

**DATES: 31 Mar – 04 Apr, 2014**

**VENUE: PROTEA HOTEL, LIVINGSTONE**

**Fees per Delegate: K7364.50 Including Tax**

**NOTE:**

1. The delegate registration fee includes refreshments on arrival, tea and coffee breaks as well as lunch.
2. The delegate’s fees also include comprehensive material and Certificate of Attendance.
3. But **EXCLUDES** delegates’ accommodation, Dinners and transportation costs.

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**Course Objectives**

Walk away with the power to:

- **Understand** how lean thinking has evolved since its inception, and how it applies to different sectors, operations and business processes, including the Project and Construction domain
- **See** how Lean Thinking principles applied to Project's early stages convert into higher customer satisfaction
- **Understand** in depth the *Lean Project Management* philosophy, performance goals and critical success factors
- **Learn** how to see waste throughout your organization, from engineering to construction works
- **Understand** the Last-Planner tactics in detail, and deploy it in your projects for timely completion and respect of budget
- **Develop** a strategy and a medium-term implementation plan to incorporate lean principles into your projects
- **Know** how to develop a lean culture within your Organisation and diffuse top-down it at all levels
- **Use** lean ideas to see project works as a "process" and to think about its improvement along the entire value chain
- **Learn** the core principles of Construction Management in a Lean environment and fill your toolbox with practical hints and tips valid for any construction/installation/turn-key organization
- **Discover** new horizons in Contract Management, building sound relationships with Client, Consultants and Sub-Contractors
- **See** how Lean Principles can easily and effectively be deployed in any type of project work, including once-off projects, product design and development, software development – as well as in all Engineering/Architectural design works
- **Avoid** the common pitfalls normally encountered during Lean implementation
- **Explore** the key requirements for successful employee involvement in Lean practices
- **Implement** strategies to increase Project Performance through Lean-Thinking people while assuring their job satisfaction
- **Gain** an in-depth insight into how lean ideas have evolved and are continuing to evolve into a fascinating, future scenario



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***About your course leader***

Born in Macerata, Italy, he holds a doctor degree in Electrical Engineering from Politecnico di Milano and decades of experience in Plant Engineering, Project Engineering and Project Management, as well as Industrial Engineering and Operations Management.

He has been an Independent Industrial Consultant and Human Resources Trainer since 1979 and has worked in a wide spectrum of companies and industries in many countries including Southern Africa, Italy, Cape Verde, Romania, Malta, Cyprus, Lebanon, Mauritius, Kenya, Saudi Arabia, Seychelles, Malaysia and India. His area of expertise lies in World-Class Performance for Small and Medium Enterprises in the Project, Manufacturing, and Services sectors.

He has co-operated, inter-alia, with several Italian Chambers of Commerce and Industry, the Cyprus Chamber of Commerce and Industry, the Cyprus Productivity Centre, the Malta Federation of Industry, the Mauritius Employers' Federation, the Romanian Paper Industry Association, the United Nations Industrial Development Organisation, the Seychelles Chamber of Commerce and Industry, the Federation of Kenya Employers and the University of Cape Town.

His courses and seminars, conducted in English, Italian and French, have been attended by over 17.000 Entrepreneurs, Managers, Supervisors and Employees. They feature a very high level of interaction, and are rich in simulations, exercising and real case studies. The approach is invariably "hands-on" and addressed for immediate, practical application.

***BOOKING INFO: Lean Project Management***  
***Lean Construction Management***

**PLEASE NOTE:** To ensure accuracy of spelling on name badges and certificates and all other event follow up documentation, please complete this form in **NEAT BLOCK LETTERS**

**COMPANY NAME:** \_\_\_\_\_

**POSTAL ADDRESS:** \_\_\_\_\_

**TEL #:** \_\_\_\_\_ **Fax #:** \_\_\_\_\_ **Vat Reg.** \_\_\_\_\_

**NOMINATED DELEGATES;**

1. **Delegate Name:** \_\_\_\_\_ **Designation:** \_\_\_\_\_

2. **Delegate Name:** \_\_\_\_\_ **Designation:** \_\_\_\_\_

3. **Delegate Name:** \_\_\_\_\_ **Designation:** \_\_\_\_\_

4. **Delegate Name:** \_\_\_\_\_ **Designation:** \_\_\_\_\_

**AUTHORISATION for PAYMENT** - I, the undersigned hereby authorize the above delegate/s registration. I confirm that I understand the Terms and Conditions and that I am authorized on behalf of my organization to sign this booking.

**Name:** \_\_\_\_\_ **Position:** \_\_\_\_\_

**Signature:** \_\_\_\_\_ **Mobile #:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**TERMS and CONDITIONS** - On receipt of this booking form we will email a VAT invoice from **Kazma Investments Ltd**. Our terms are payment to be received by us within 7 days of invoice. Payment must be received in order to admit delegates for this event. If, for any reason a delegate is unable to attend after payment has been received an alternative or substitute delegate may attend. Cancellations must be in writing, and if received by us in writing fourteen days before the event, a 50% refund will be made. Cancellations made within fourteen days of the event will not qualify for any refund or credit.

**ALTERATIONS TO ADVERTISED PACKAGE** – **Kazma Investments Ltd** reserves the right to alter this programme without notice or penalty and in such situations no refunds or part – refunds or alternative offer will be made. Should **Kazma Investments Ltd** permanently cancel an event, for any reason whatsoever, the Client shall be provided a credit of the equivalent amount paid towards the cancelled event. In the case of a postponed or cancelled event, **Kazma Investments Ltd** will not be responsible for covering airfare, accommodation, or other travel cost incurred by Clients.

**FOR MORE INFORMATION** - For more information about this event or about our comprehensive range of training courses both public and in-house we offer, please enquire through; 1) Email: [kazmainv@gmail.com](mailto:kazmainv@gmail.com) 2) Hotline: +260 955 640 117 | 973 486 007

## *From the desktop of the Course Trainer*

Dear Delegate(s),

Lean Thinking is changing the way organisations operate. No longer stuck in the paradigm of "mass" thinking, many enterprises, including service and project-driven companies as well as governmental bodies/institutions, have tried to adopt some portions of the Toyota Production System, the Lean philosophy. Many have failed. Many have rushed off, taken a course and pronounced themselves LEAN. Yet very few have tested the depths of overall performance enhancement and added competitiveness possible with a complete change of paradigms in the "lean" direction.

Research by Gallup has uncovered that less than 30% of employees are truly engaged in their jobs. Lean Thinkers have long shown that an **additional 25-40% of the work done by most organisations is waste or non-value added**. This means that nearly 40% of every payroll dollar is lost. With the advent of true global competition, can you afford to lose 40% of your time as a company?

My personal investigations have come to the conclusion that the civil construction sector, for instance, is polluted by an astonishing 65% of completely wasted labour. Can that be afforded any longer?

This course will be a shocking course for many of you. Because it demystifies all traditional principles of the first industrial revolution on which the majority of enterprises, still today, are built or around which they operate. By presenting in rather great detail the philosophy of the second industrial revolution and the main tools and disciplines readily available to all enterprises to perform in an "excellent" status, this course is a door-opener to lean project/construction practices for whoever is: ready to listen to message – prepared to abandon obsolete principles, formulas and approaches – willing to get to "lean" status.

This course will prove that competitiveness today can no longer be achieved by merely cutting costs or revamping technology: because cutting costs has a floor, while performance improvement through maximization of value-added and waste elimination has no ceiling –and because technology alone does not generate the levels of output value enterprises and organisations need to tackle the challenges of the new millennium.

This course is the logic development and extrapolation of my "Lean Manufacturing" course, dedicated to the manufacturing industry. It shows that lean principles can and should be adopted not only in operational manufacturing processes of any nature, but also in the operational processes of non-manufacturing enterprises, such as project-driven and construction companies.

By showing that "thinking" is what must change at all levels of an organization, this course will prove that higher levels of performance can be achieved if you create the right conditions.

*I hope to see you there, best regards!*