



EXCENOR
— GLOBAL —
In Pursuit of Excellence

AI Enabled Advanced Lean Training

January 2026



AI-Enabled Advanced Lean: The Future of Operational Excellence

Where time-tested Lean principles meet the transformative power of Artificial Intelligence — building a smarter, faster, and more human path to operational excellence.

Duration : 12 hrs

Mode: Classroom/Online

Eligibility-UG/PG Students/Faculty/Working

Professionals(Private/Govt.)/Startup Founders/Shop Floor personnel



The Evolution of Lean

From the Toyota Production System to AI-augmented workflows — tracing how Lean thinking has continuously adapted to meet new challenges and opportunities.

The Foundation: Core Lean Principles



Focus on Value

Identifying exactly what the customer truly wants and paying only to deliver that.



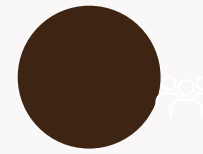
Kaizen

Small, incremental improvements compounded over time for lasting, measurable impact.



Eliminate Waste

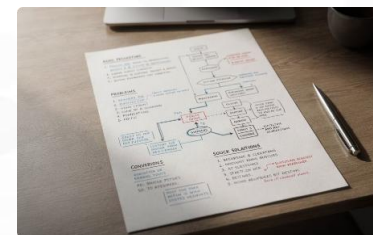
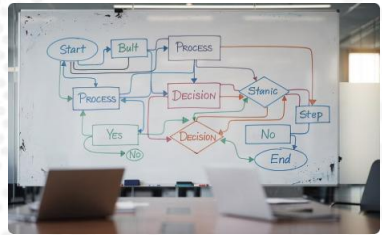
Systematically removing non-value-adding activities across every process step.



Respect for People

Empowering and engaging the workforce as the primary engine of continuous improvement.

Traditional Lean Tools: The Pillars of Efficiency



Value Stream Mapping

5 Whys

A3 Thinking

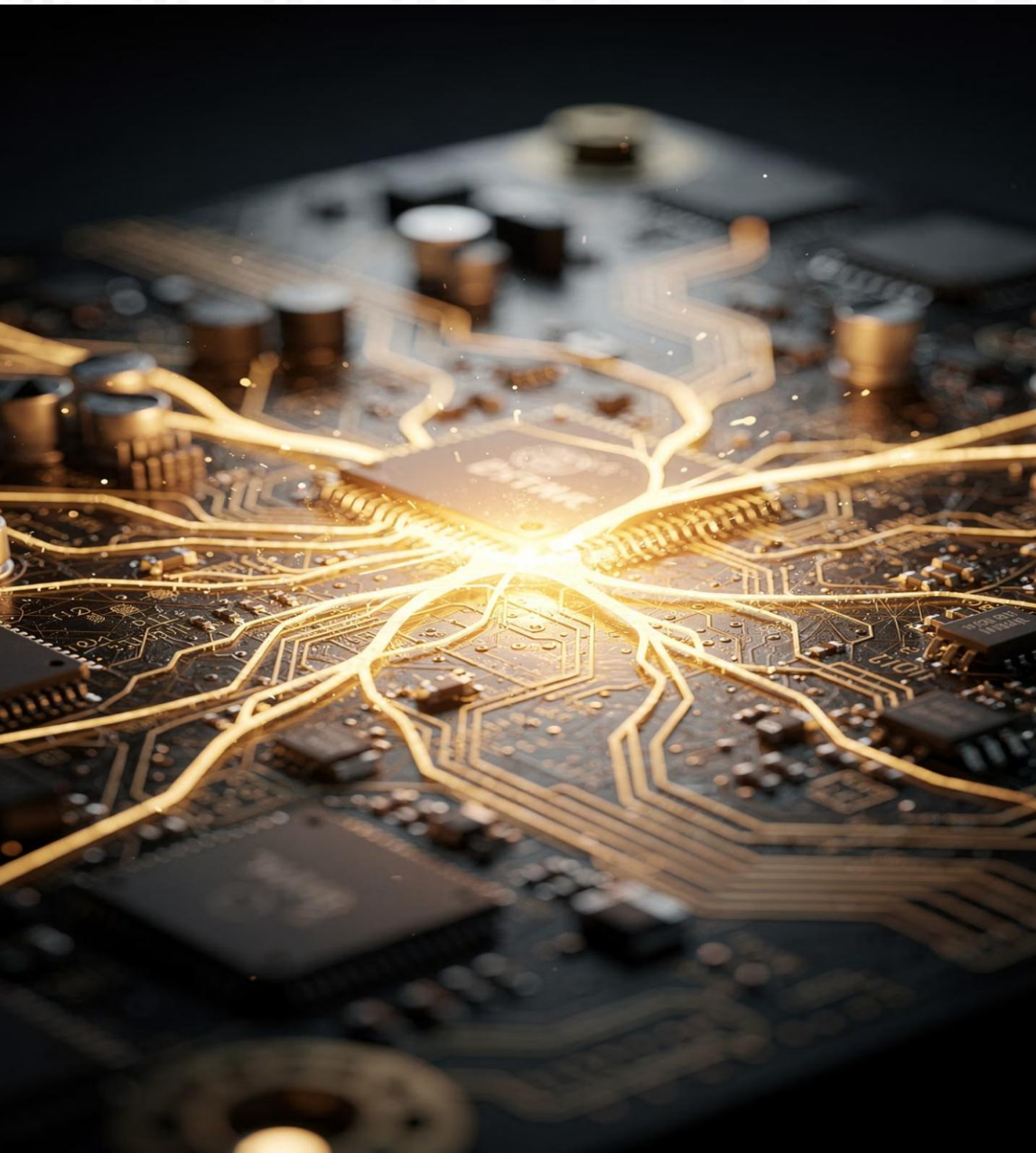
Gemba Walks

Visualises the entire process flow to identify bottlenecks, waste, and improvement opportunities end-to-end.

A root cause analysis technique that drills deeper into the fundamental reason behind any problem.

A structured, one-page approach to problem-solving that promotes clarity, alignment, and action.

Going to the actual place where work happens to observe, understand, and engage firsthand.



The AI Revolution in Lean

Artificial Intelligence is redefining what is possible in Lean — unlocking speed, precision, and scale that was previously unimaginable.

Introducing Lean AI: Augmenting Human Capability

What is Lean AI?

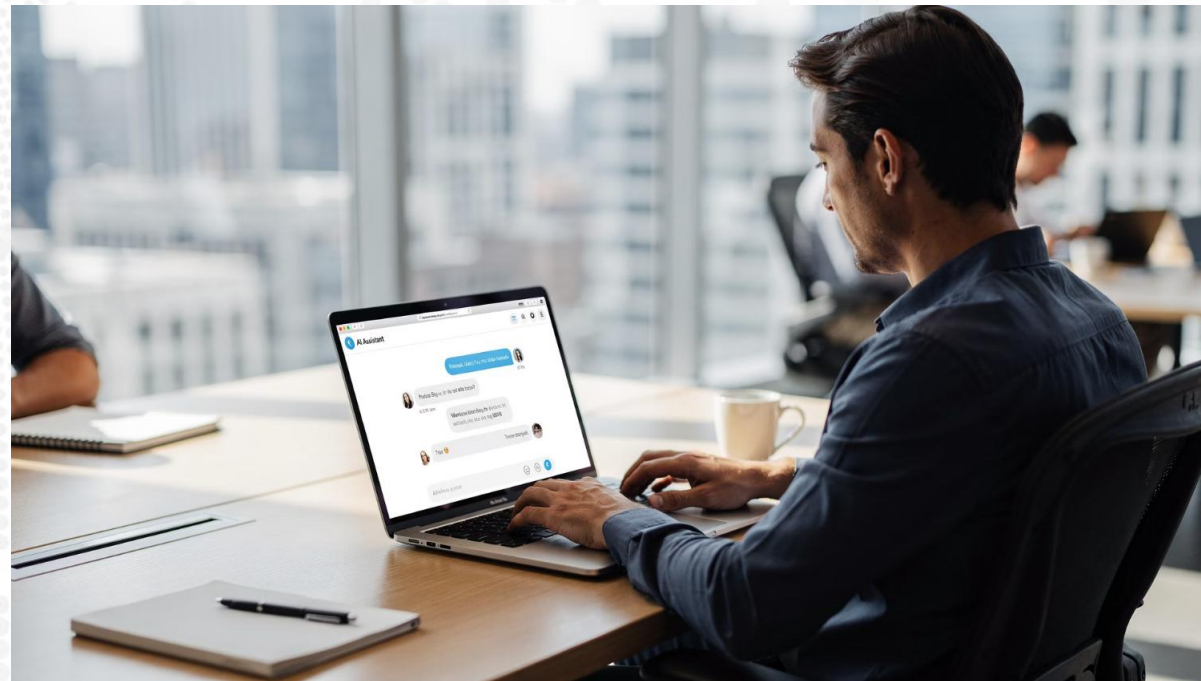
Leveraging large language models to deliver conversational coaching around proven Lean frameworks.

An Accelerator, Not a Replacement

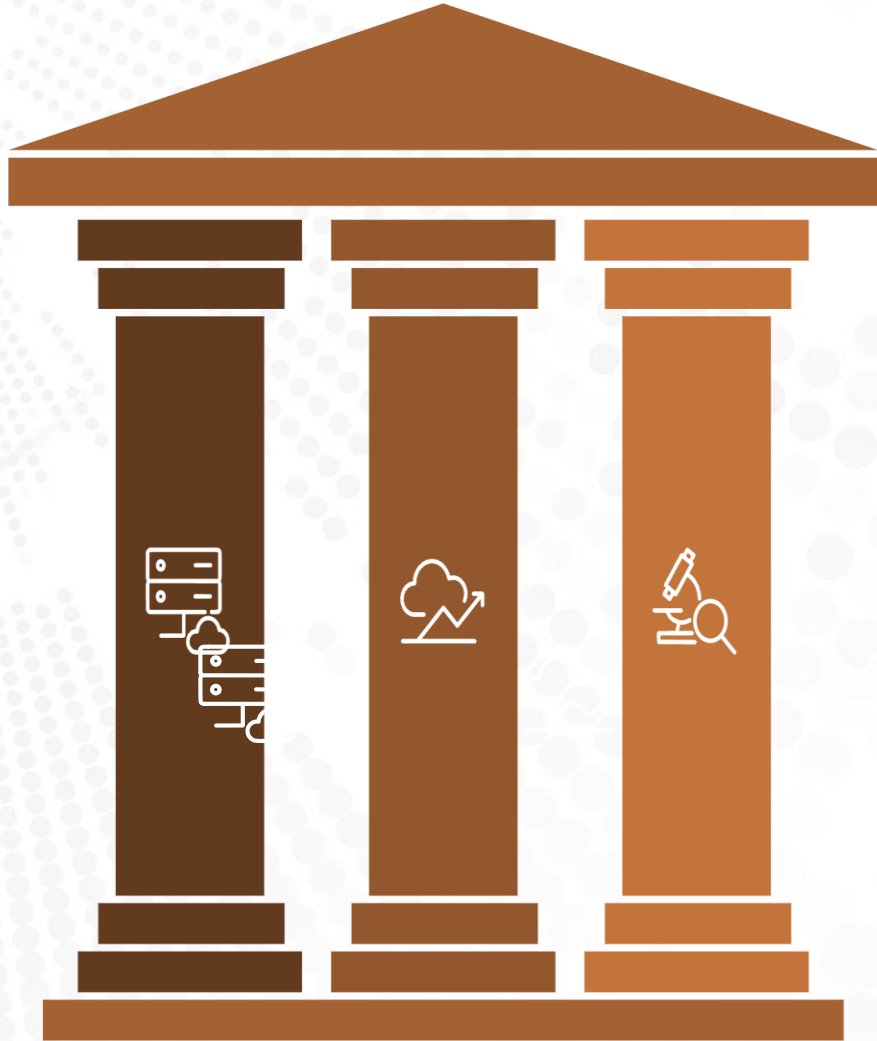
AI tools extend expert guidance, reinforce learning, and create faster feedback loops — keeping humans firmly at the centre.

Humanistic Integration

AI enhances Lean by targeting efficiency and waste reduction while preserving human-centric values.



AI-Powered Value Stream Mapping (VSM)



Dynamic Visualisation

Real-time interactive maps from live data

Predictive Bottleneck ID

Forecast constraints before they impact flow

Automated Data Analysis

Highlight waste and suggest improvements automatically



Advanced AI for Problem Solving & Root Cause Analysis

Conversational A3 Coach

AI guides users through each A3 step with tailored questions and structured thinking patterns.

Intelligent 5 Whys

AI suggests deeper "whys" grounded in industry knowledge and historical data, uncovering more profound root causes.

Contextualised Examples

AI generates role-specific, industry-tailored examples for every Lean concept — making learning immediately relevant and applicable.



Building the AI-Enabled Lean Body of Knowledge

Structuring a curated, expert-validated ecosystem of AI tools, frameworks, and learning resources that practitioners can access on demand.

The Lean AI Portal: A Hub for Capability Building

A structured platform that brings together conversational AI tools, expert-validated content, and adaptive learning resources in one accessible space.

→ Curated Tools

Conversational AI tools built around specific Lean practices, approved by experts like Art Smalley.

→ JM & 5-Why Analysis

Job Methods and 5-Why tools accessible through guided dialogue for immediate on-the-floor application.

→ AI Learning Platform

Definitions, usage guidelines, and AI-customised examples for every Lean concept.

Why a Portal?

Organisations need a single source of truth for Lean AI tools — one that is validated, scalable, and continuously updated as both Lean practice and AI capability evolve.

Expert-curated and peer-reviewed content

Scalable across roles and industries

Continuously updated with emerging AI capabilities

Integrating AI with Core Lean Tools



AI-Assisted Gemba

AI analyses observations from Gemba walks, identifies patterns across sessions, and surfaces areas for deeper investigation — enhancing what the human eye can see.



Automated Standard Work Updates

AI monitors process variations in real time and recommends updates to Standard Work documentation, keeping SOPs accurate and current.



Predictive Maintenance (TPM)

AI analyses live sensor data to forecast equipment failures before they occur — fully aligned with Total Productive Maintenance principles.



The Future is Now: Transformation Through Lean-AI

Accelerated Capability Development

Empowering individuals and teams to adapt at the speed of customer change.

Human-Centric AI

Ensuring AI implementation uplifts — rather than replaces — human capabilities, judgement, and dignity.

Sustainable Competitive Advantage

Leveraging AI-driven Lean for enhanced efficiency, breakthrough innovation, and lasting market differentiation.

To know more about our LSS trainings

Contact Us



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