



## **INSTITUTE FOR LEAN CONSTRUCTION EXCELLENCE (ILCE)**

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## EDUCATIVE NEWSLETTER NO.9

### LEAN CONSTRUCTION

#### **Today's Jargon - Tomorrow common place terms**

##### **Value Adding and Non Value adding activities**

Value adding activities refers to those which are basically required for the process/project.

Non Value adding activities refer to those which do not contribute any value to the process/project

Focus of Lean Construction is to eliminate/reduce non value adding activities

##### **Mura**

Japanese word referring to the unevenness in construction as opposite to continuous flow.

Correction by adopting Lean construction.

##### **Muri**

Japanese word referring to the stress involved in non achievable targets which in turn destroys morale.

Correction is by adopting Lean Construction.

##### **Muda**

Japanese word for waste involved in the processes of construction.

Focus of Lean Construction is to remove this waste.

##### **Continuous Improvement**

Consistency in small improvement of performance and achievements of targets.

Essential of Lean Construction.

##### **Kaizen**

Japanese synonym for continuous improvement.

Essential for Lean construction

##### **Constraint analysis**

Analysis adopted by players of Project for identifying constraints in flow of work and for subsequent correction.

### **Continuous Flow**

Construction work proceeding without any interruption between various activities of project.

Each activity also just being completed for start of subsequent activity.

Continuous flow along with concurrent activities is Lean Construction at its best.

### **Value Stream**

This refers to all activities both value creating and non value creating for the delivery of the project.

This refers right from the concept stage to the ultimate handing over of the project.

### **Value stream Mapping**

This refers to the in depth look at each and every requirement for the process/project.

This to include all resources, none excluded, be it materials, machinery, work force required etc

### **Percent Plans Complete (PPC)**

Refers to periodic achievement of work done, as against targets usually recorded in graphical form.

This is Lean Construction Score Board.

### **Relational Contracting**

Refers to the Personal Relationship between the different players of the project.

Lean Construction focus is to bring about harmonious relationship between the players of the project

### **Building Information Modeling (BIM)**

BIM is a digital representation (computer) capturing

- Building - the entire lifecycle of the building is considered (design/build/operations)
- Information - all information about the building and its lifecycle is included.
- Modelling - defining and simulating the building, its delivery, and operation using integrated tools.

BIM is most powerful tool for Lean Construction.

### **Integrated Project Delivery**

Close and complete collaboration approach by players of project for improvement of performance in congenial surroundings

Focus is to optimize entire project.  
Virtual Firm for the project by the players of the project.  
Best results with BIM

### **Lean Project Delivery System (LPDS)**

Integrates the different phases of project.  
Namely Project Definition, Lean Design, Lean Construction in cost, time and quality  
Focus on optimization of Project delivery

### **Reverse Phase Scheduling**

Working backwards towards the ultimate target for the delivery of the project.  
Focus on what should be done in each stage of the project.  
Lean Construction helps in bringing the different players of the project for the same.  
This is the Pull-essential for lean construction

### **Set Based Design**

This is approach for deferring design decisions to the last moment to afford time for working out the various alternatives for the optimum delivery of project in time, cost and quality.  
Lean Construction eminently addresses this since players of project work in close collaboration

### **Target Value Design**

Herein the Designers and the construction group work together in collaboration towards achieving the best design for delivering the project within the amount made available for the project.  
This is essence of Lean Construction

The list is ever growing

### **Conclusion**

Dear Reader,  
We have come to the conclusion of our Educative Newsletters in Lean Construction and its Applications .  
Do hope these have enthused you to apply Lean Construction in your processes/project.

ILCE is always with you for any help in enabling the practice Lean Construction in your own processes/project.