



Webinar on Lean Construction 12th July 2021

Conducted by JUIT Student Chapter of IGBC

Introduction

Jaypee University of Information and Technology's Student Chapter of Indian Green Building Council (IGBC) was inaugurated on 13th May 2021. The webinar on Lean construction dated 12th July 2021 was arranged and organised by JUIT student chapter of IGBC under Online Expert Lecture Series on Fundamental of Green Building Construction. The program focuses on the identification of lag activities, reason behind lag and their lean solution in simple and complex industry projects, by using 60+ lean tools and designs for different industry related problem. The webinar was beneficial to developers, builder's students and construction companies.

Webinar Structure

The Lean Construction Webinar was organized in online mode via Webex platform and hosted by IGBC Chandigarh Chapter in association with Jaypee University of Information & Technology. Invitations to the Webinar were distributed by the host, the JUIT IGBC Team to their networks and students.

Lean Construction Webinar

As the construction industry is migrating towards sustainability, efficient and better methods of construction, it's important to understand the concept and application of lean construction which includes 60+ lean tools and design for giving optimum solutions to problems related to delay or lag in the project which results in compromising the output of end clients. The objective of the webinar is to develop an understanding of lean construction with its application in simple and complex construction projects.

IGBC Webinar Team and Schedule

- | | |
|---|-----------------------------|
| 1) Mr. Jit Kumar Gupta
Chair, IGBC Chandigarh Chapter | - Welcome Remarks |
| 2) Mr. Tony Jacob
Director & Principal Consultant
Constask Management Solution LLP | - Technical Session |
| 3) Mr Amit Srivastava
Co-Chairman, IGBC UP Chapter | - Concluding Remarks |

Coordinated for JUIT by

1. **Dr. Tanmay Gupta**, Chairman, JUIT student Chapter of IGBC

Overview and Topic of Discussion

Mr. Jit Kumar Gupta opened the webinar by providing an overview on Lean Construction and effectively linked it with the upliftment of work which will lead to benefit of society. Next Mr. Tony Jacob showed the grey shade of the construction industry, how they are struggling to achieve time, cost & quality at the same time which states the deficiency or gap in Macro and Micro Planning. To bridge the gap revamp is the alternate solution suggested by the speaker which works on a management methodology & approach that all constraints are on the same page without disturbing the workflow. Speaker also explains silo optimization which is the result of overburden due to a gap in workflow by delayed information, resources, etc. in which everyone will be worried about their output ignoring the overall project outcome, giving rise to the demand of lean construction having 60+ design and tools. The two design tools discussed were The Last Planner System LPS and Value Stream Mapping, the latter system was used to design the proper & predictable workflow by imparting value flow in the industry. Value Stream Mapping will help in evaluating and excluding the non-value adding services in the project which can obstruct the workflow, then after discussing the lean constructions for project professionals the advantages concerning Productivity, Time, Cost, Safety, and Quality were discussed. After the end of the Technical Session, Q & A or queries were discussed and proficiently answered by Mr. Tony Jacob. Mr. Amit Srivastava ended the webinar with his concluding remarks on lean construction.

Key Words – Silo Optimisation, Last Planner system, Value Mapping System.

Topic of Discussion

- 1) Opening Remarks
- 2) Macro – Micro Planning
- 3) Revamp – Project Management
- 4) Why Lean Construction
- 5) Lean Perfect State
- 6) Lean Thinking
- 7) Tools and Design – The Last Planner & Value Stream Mapping
- 8) Lean Construction for Project Professionals
- 9) Lean Construction – Advantages
- 10) Q and A Session
- 11) Conclusion Remarks

Feedback from Students

The feedback was conducted through a form circulated among the participants and the webinar was ranked Excellent. Students wished to learn more design and tools of lean construction in future endeavours.

Selected Screen Shots from the webinar

The Last Planner[®]

- The **collaborative & commitment-based planning system** to improve **Reliability & Predictability** of Schedules
- The **Last Planner[®]** (sometimes referred to as the Last Planner[®] System or LPS) is a production planning system designed to produce **predictable work flow and rapid learning** in programming, design, construction and commissioning of projects.
- Last Planner[®] was developed by Glenn Ballard and Greg Howell.
- LCI licenses the use of these processes and related IP to various organizations.

www.constask.com | contact@constask.com | /constask | /company/constask | /constask4u

Value Stream Mapping

Material & information flow mapping

Value Stream Mapping study shows 55% time as Non Value Adding

Activity	Time (min)	Value
Searching for Material	10	0
Delay in inspection	10	0
No proper access	10	0
In experienced builder judgement	10	0
Delay in crane taking clearance	10	0
Wrong party Remark	10	0
Time Required (13 hrs)	13	100%
Time as Non Value Adding	7.25	55%
Time as Value Adding	5.75	45%

www.constask.com | contact@constask.com | /constask | /company/constask | /constask4u

Lean Construction for Project Professionals (LCPP)

Level 01 Foundation

Level 02 Practitioner

Level 03 Champion

CM-LEAN CERTIFICATE OF MANAGEMENT LEAN CONSTRUCTION

An assessment-based certificate credential listed on AISC's Lean Construction Education Program & LCPP

www.constask.com | contact@constask.com | /constask | /company/constask | /constask4u

First Run Studies

Value Stream Mapping

Plan Do Check Act

Lean Workstructuring

Choose By Advantage

A3

Set Based Design

Pull Planning

Integrated Project Delivery

Target Value Design

Lean Project Delivery System

Last Planner[®] System

5 Why

Pareto Analysis

Fish bone analysis

Constraint Analysis

5+1 S

7+1 Wastes

Kaizen

Kanban

Collaboration

Last Responsible Moment

Error Proofing

Make ready

Gemba Walk

www.constask.com | contact@constask.com | /constask | /company/constask | /constask4u

Design & Engineering

Procurement & Supply

Assembly & Construction

Commissioning & Occupancy

Lean Workstructuring

How to buy/fabricate/select (Supply Chain)

How to build/assembly (Process)

What to Build (Product)

www.constask.com | contact@constask.com | /constask | /company/constask | /constask4u

Why Construction need Lean ?

Missing value for customer

Transactional

Low resource efficiency

Resources waiting for work

Broken workflow

Work waiting for resources

Unevenness

Varying or unscheduled arrival of work

Overburden

Forced to overload system & resources

Silo optimization

Never worried about project outcome

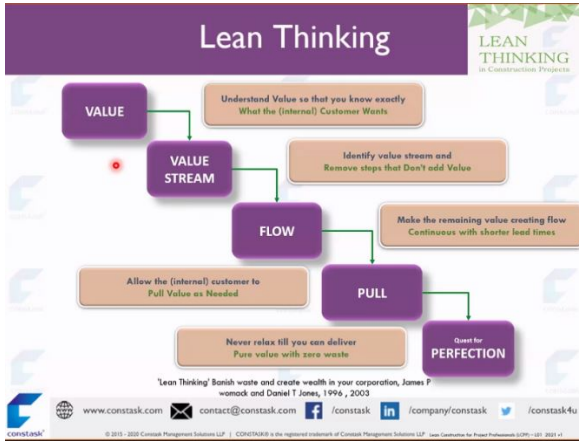
Firefighting becomes a norm

Failed paradigm

Time, Cost & Quality together is myth

Reactive

www.constask.com | contact@constask.com | /constask | /company/constask | /constask4u



Join Us

Credentiation of Indian Industry

Webinar on Lean Construction

12 July 2021 : 1645 - 1800 Hrs

Welcome remarks by
Ar. Jit Kumar Gupta
Chairman
IGBC Durgamcherry Chapter

Concluding remarks by
Mr. Anil Srivastava
Co Chairman
IGBC UP State Chapter

Emceeship by

Mr. Tony Jacob
Director & Principal Consultant,
Constask Management Solutions LLP

In Collaboration with

For Registration, Please scan the QR Code or Visit :
<http://www.igbclean.com>

+91 7037198501 | webinar@igbc.in