

From Reactive Tracking to Proactive Planning: A Lean Approach to Project Delivery

How Lean Production Control and the Last Planner System® improve readiness, accountability and delivery reliability at scale

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Hosted by Lean Construction Ireland



Use QR code for Detailed case study's available at
www.mchughleanconstruction.com/casestudy1

In this webinar

Why large projects fail even when the programme looks healthy

How Lean Construction and Koskela's TFM theory change production control

How the Last Planner System® and digital visibility improve reliability at scale

What changed on a live Irish energy project that moved PPC from ~12% to ~64%

Why Big Projects Fail — How to establish control

Large projects rarely fail for lack of activity or software; they fail because variability, fragmented interfaces and delayed decisions disrupt flow.

Programme management tracks dates and milestones, but often hides whether work is genuinely ready to start.

Lean production control focuses on the conditions for reliable flow: clear tasks, cleared prerequisites, collaborative planning and learning from failure.

Key message

The question is not “Are we on programme?” but “Are we ready, coordinated and able to deliver as promised?”

Late decisions



Fragmented interfaces



Unready tasks



Flow disruption

The Logic of Flow: Transformation, Flow, Value

Transformation

Construction converts inputs into outputs: design into fabrication, materials into installed work, systems into operational assets.

Transformation matters, but on its own it tells us little about readiness, waiting or coordination loss.

Flow

Flow focuses on continuity, hand-offs, waiting, interruption and variability across the production system.

Value

Value focuses on whether the system delivers what downstream users need, when they need it and in a form they can use.

Key message

TFV explains why controlling only tasks and dates is inadequate: production control must protect flow and deliver downstream value.

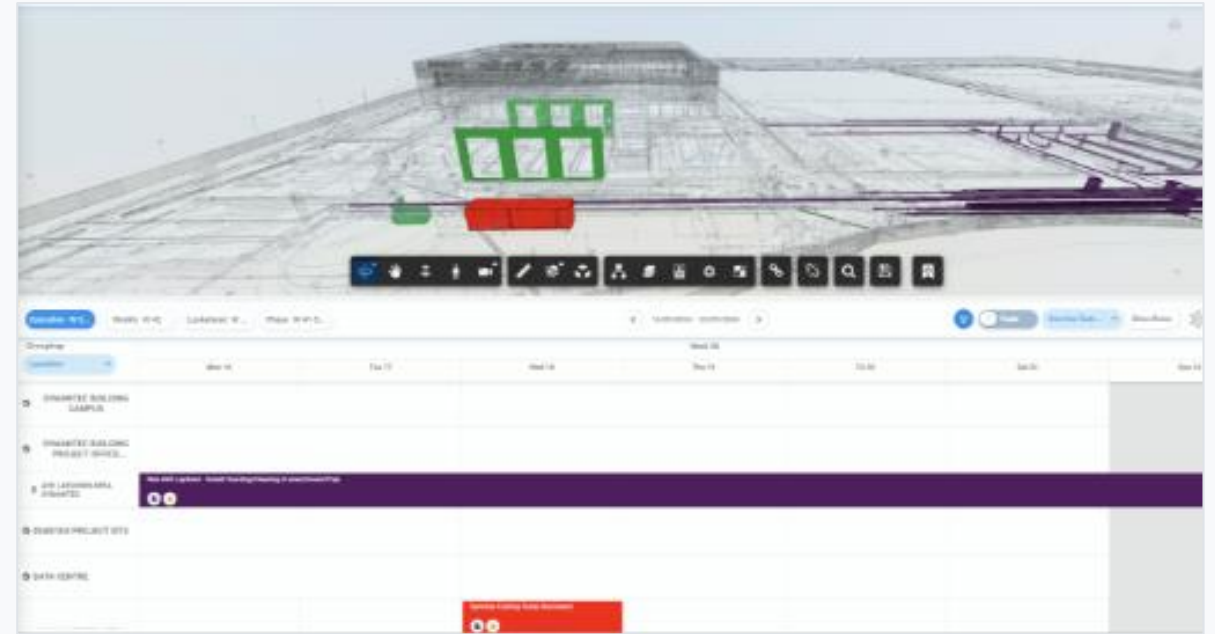
From Theory to the Weekly Plan

If flow matters...

the planning system must reveal blockers early, sequence work around prerequisites and reduce variation at interfaces.

If value matters...

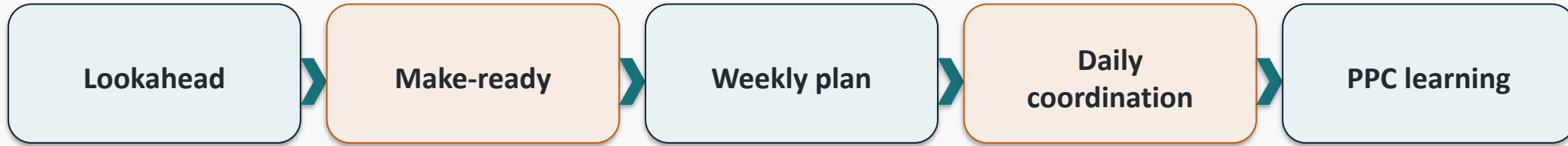
internal hand-offs must be treated like customer deliveries: each trade should receive work that is usable, complete and ready for the next operation.



Key message

TFV turns production control into a system for managing constraints, hand-offs and learning—not simply a process for updating the schedule.

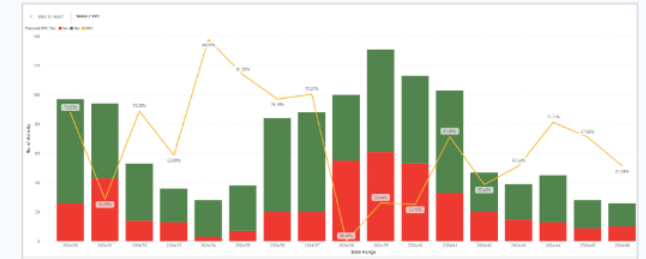
Last Planner System®: Planning by Promises



Lookahead planning checks whether prerequisites can be cleared in time.

Make-ready removes constraints before work enters the weekly plan, so commitments rest on verified readiness.

Weekly and daily routines form a feedback loop: promise, execute, learn from misses, improve.



Key message

LPS operationalises Lean and TFV by turning planning into a disciplined cycle of readiness, commitment, execution and learning.

When “On Programme” Hides the Truth

Work can look on track in programme reviews while the field stays unready — docs, access, QA or preceding work incomplete.

Milestone pressure breeds defensive reporting: teams protect dates instead of surfacing blockers.

As complexity grows, the gap between schedule status and production reality widens — unless readiness is visible weekly and daily.

Status can look green while work is still not ready

Programme



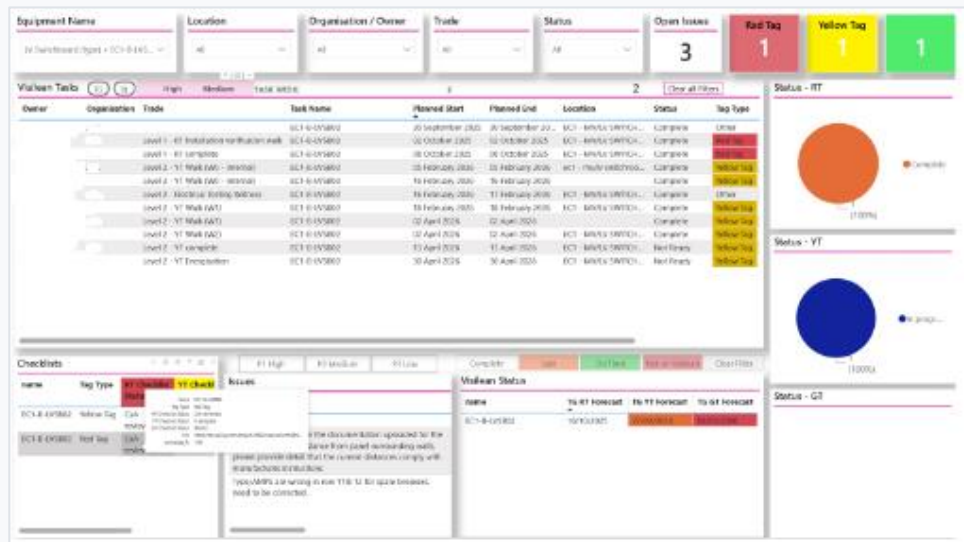
Access



QA



Docs



Key message

Complexity punishes optimistic scheduling and rewards systems that expose readiness gaps early.

Why Lean Has to Go Digital at Scale

Physical boards are powerful locally

They make work visible to teams in the room and drive local collaboration.

But large campuses, multiple zones and dispersed leadership need wider visibility and faster feedback.

Digitisation extends Lean at scale

It connects lookaheads, weekly commitments, field updates and dashboards across many teams and work fronts.

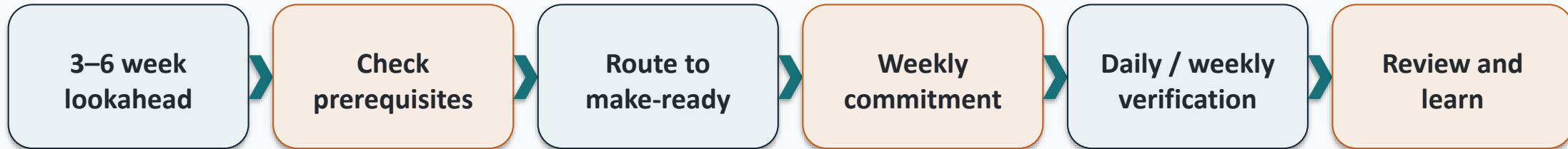
The value is planning discipline and transparency when complexity exceeds what manual systems can hold together.



Key message

Digital production control should scale lean routines without losing the immediacy and accountability of collaborative planning.

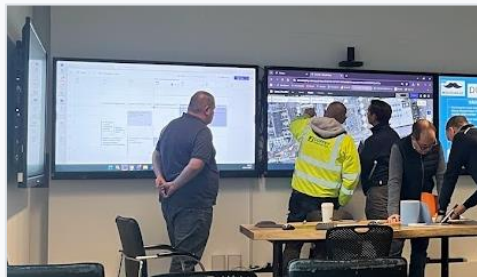
A Workflow That Verifies Every Commitment



A 3–6 week lookahead checks access, documentation, QA, preceding trades, permits and commissioning dependencies before commitment.

Tasks that fail prerequisites are routed into make-ready actions with named owners and due dates — not into the weekly plan on assumption.

Weekly and daily reviews verify status and hand-off quality: ready, started, blocked or complete.



Key message

Verification is built into the workflow: each commitment is checked before release, re-checked in execution and reviewed after completion.

Case Study: A Live Energy Project in Ireland

Project context

Live industrial energy-centre project in Ireland.

Multiple energy centres, dual-fuel engines and battery storage delivered in parallel.

Critical problem

The construction-to-commissioning transition: physical progress looked acceptable, but commissioning work lagged because prerequisites were dispersed and poorly represented in the programme.

Approach

A Digital Lean Production System combined collaborative planning routines with VisiLean, Power BI and Mural to surface readiness gaps and coordinate action across interfaces.

Key message

The case shows why readiness-first digital planning is most valuable where interfaces, documentation and commissioning dependencies are tightly coupled.

What Changed When Readiness Led

Before

Programme status dominated meetings.
Task descriptions were ambiguous and hand-offs weak.
Constraint management was reactive and voice-dominated.

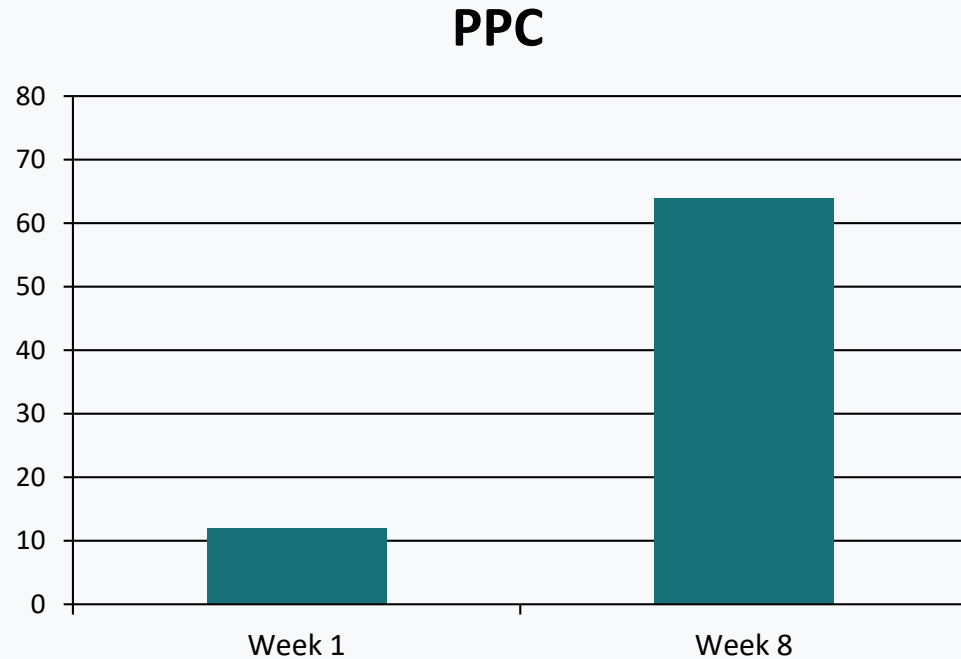
After

Not Ready tasks were openly flagged and traced to missing prerequisites.
Task definitions became clearer, more action-oriented and easier to verify.
Dashboards widened participation and supported earlier blocker removal.

Key message

The improvement came from a socio-technical reconfiguration: routines, definitions, dashboards and leadership behaviour changed together.

From 12% to 64% Plan Reliability



What improved with readiness-led planning

Percent Plan Complete improved from approximately 12% to approximately 64% over eight weeks as commitments became more realistic and constraints were surfaced earlier.

Dashboard-led conversations depersonalised variance: the discussion shifted from who was at fault to what condition was missing and who owned the next action.

The digital environment strengthened accountability because commitments, blockers, owners and due dates became visible across the project rather than remaining in isolated meetings.

Key message

Reliable accountability is not punitive; it is transparent, evidence-based and tied to the removal of constraints.

Your Roadmap to Reliable Delivery

1

Define what “ready”, “started”, “complete” and “not ready” mean in your context, including commissioning and documentation prerequisites.

2

Design the meeting cadence around lookahead, make-ready, weekly commitment and daily verification, then configure the digital tools to support that cadence.

3

Build leadership habits that reward honest flagging of blockers, insist on daily updates and treat variance as learning for the system rather than failure to hide.

Key message

Software should be the last design decision, not the first; first design the behaviours, definitions and routines you need.

Digitise the Discipline of Lean

Production theory

Lean Construction production control begins with a better understanding of production itself: Transformation, Flow and Value must all be managed together.

Operating system

The Last Planner System provides the commitment-based routines.

Digital extension

Digitisation extends those routines across large, complex projects by making readiness, ownership and status visible at scale.



Key message

The aim is not digital reporting. The aim is a scalable socio-technical system that verifies commitments, strengthens accountability and protects reliable flow.

Let's Discuss: From Concepts to Your Projects



PROJECTSABOUT USVALUESCONTACT US

👉 The project lacked a true production system

Critically: Kevin did not just introduce tools—he mentored teams on how to use them in live delivery

WHY THIS MATTERS

Most projects fail not because of poor planning—but because planning is disconnected from execution.

Kevin ensures that:
What is planned can actually be delivered

If your project feels busy but not productive—Kevin can help you regain control

Links to publications

[On the Role of Lean in Digital Construction](#)

[Towards Lean Construction Site 4.0](#)

[Lean Digital Management for Production Control](#)

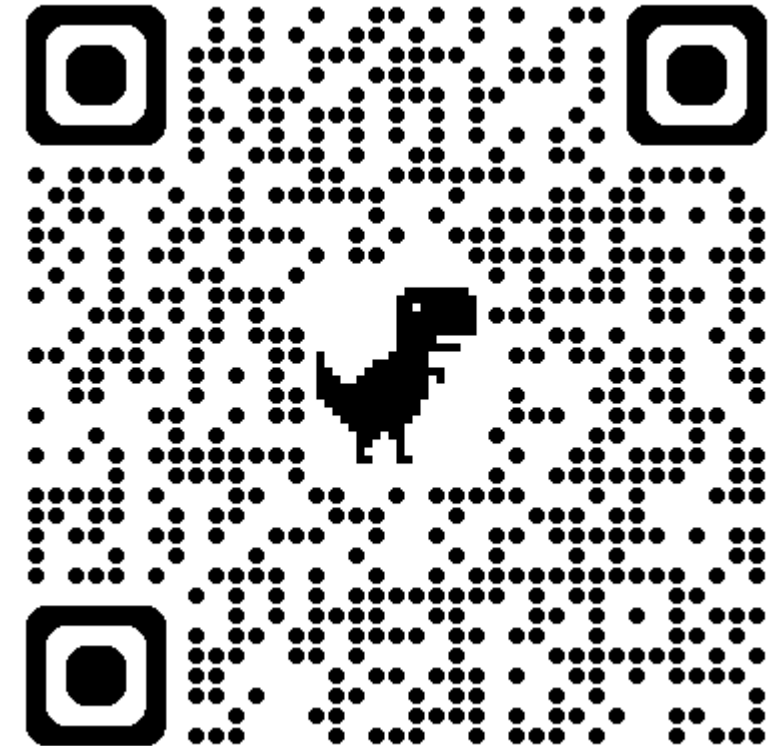
[Lean Thinking for a Digital Last Planner System](#)

[The Role of Lean in Digital Project Delivery](#)

[Reality Capture Connecting Project Stakeholders](#)

[Role of a Digital Last Planner® System to Ensuring Safe and Productive Workforce and Workflow in Covid-19 Pandemic](#)

[Integrated Lean and Bim Processes for Modularised Construction – A Case Study](#)



Key message

Use the Q&A to move from concepts to your own deployment context.