

The latest news, views, and announcements

## Message from the Chair pg2

"Welcome to our first Newsletter for Lean Construction Australia and New Zealand. We are heading towards our third year of our Lean Construction..."

## LCANZ Upcoming Events pg2-3

IGLC is coming to NZ 2024! Future Infrastructure Summit find out more...

## What's Happening in our regions? Pg3

Vic Council 'War on Waste' Communities of Practice

SA Council Member Expressions of Interest Open Now!



**FUTURE INFRASTRUCTURE SUMMIT**  
Is coming March 2023  
Visit [website](#) for more details!



**Want to know more?  
Become a LCANZ member now!**

## What's News?

**Pg 4-5:** It's time to bring Operational Excellence to the fore

*LCANZ Director (NZ) Stephanie Pretorius discusses the construction industry's need to re-focus on Operational Excellence as a way forward. Enabling Continuous improvement capability and lean methods and tools to drive results.*

**Pg 5:** Case Study: Tidy Slabs

*Managing Director Andy Garvie reflects on his LEAN journey and how adopting Lean Tools has changed his organisation.*

**Pg 6:** Leveraging 'Last Planner' & 'Getting Things Done'

*Phil Hendy, LCANZ Director of our Vic council compares the Last Planner approach with Getting Things Done.*

**Pg 7-8:** What's Industry News?

*Latest research articles featuring "Investigation into Construction Supply Chain Industries" and "Aligning Collaborative Project Behaviours"*

**Pg 8:** Memberships: How to Get Involved!

# Message from the Chair



Michael Ward, Chair LCANZ

Welcome to our first Newsletter for Lean Construction Australia and New Zealand. We are heading towards our third year of our Lean Construction Institute incorporating New Zealand and with the COVID restrictions lifted, we are getting back to more face-to-face meetings and seminars whilst maintaining our monthly webinars.

We have achieved much and have much more to do. Our Webinars have featured international lean leaders, we have co-hosted the Future Infrastructure Summit with Building Smart Australia and we are building our membership including corporate members. LCANZ was represented at the federal government’s parliamentary enquiry into procurement practices.

Our global Lean Network is providing support with training and development material provided by LCI UK and we are interfacing with LCI in Ireland. We have set up a pay for view of past webinars for non-members providing the opportunity for raising awareness of the opportunities that lean practices can bring.

Looking ahead we are progressing our mission to further raise the awareness to improve productivity through lean practices. Of significance, through our New Zealand council we will with Auckland University of Technology be co-hosting the International Group for Lean Construction annual conference in New Zealand in 2024.

# Future Infrastructure Summit 2023 (FIS)

2022 has proven to be a challenging year for the construction industry. With unprecedented demand, we have faced headwinds that show little sign of abating. With a critical workforce shortage of 105,000 workers within the next 12 months, we are entering period where innovation and forward thinking will be critical to our success.

Therefore, the theme of the next Future Infrastructure Summit (FIS) is ‘Doing more with less’. Enhancing productivity is all about being able to do more with the limited resources we have. This year’s theme focuses on the many ways in which digital engineering, and lean thinking and tools, provide the best opportunity for industry to become more productive while enhancing the safety and sustainability of our projects.

Over the years, FIS has attracted hundreds of industry leaders, providing them a unique and highly valuable opportunity to learn from global experts who are using Lean thinking and Digital Engineering.



**International Group for Lean Construction (IGLC) is coming to Auckland in 2024 hosted at AUT and LCANZ**  
**Stay tuned for more!**



# Upcoming Events

<https://leanconstructionanz.webcastcloud.com/>

**Sustaining Construction through Digitalisation from a Lean perspective** 5pm  
27<sup>th</sup>  
Oct  
2022

Dr. Bhargav Dave, CEO

**Last Planner Q&A** Nov  
2022

Glen Ballard, Last Planner

**Collaborative Lean Decisions** TBC

Paz Arroyo, DPR

## Webinar Spotlight!

### Collaborative Lean Decisions

This webinar will review the relevance of collaboration in Decision Making in projects, we will explore how do we move away from working in silos and start implementing collaborative and inclusive lean approach such as Choosing By Advantages. We will also touch on how this approach helps us with sustainability challenges in construction industry.



**Library of Webinars FREE for Members**  
**\$15 per webinar for Non-Members**

**Join now!**

Visit the [LCANZ Website](https://leanconstructionanz.org)

## VIC Council CoP: Waging the War on Waste - Error Management & Rework

John Morrison, WPA



“Frontline Coach” [John Morrison](#), shared his insights and learnings in helping Western Program Alliance’s drive its ‘War on Waste’. This industry initiative focuses on developing and implementing error management and rework reporting capabilities in an infrastructure construction environment.

The event focused on the impact of errors and rework on the lives of people working in the industry. John shared with our community how we can create an environment and culture to reduce these impacts through research, education, and practical management solutions.

Lean Coffee events are a great way to catch up and chat about the people side of lean. Tickets are limited to keep the sessions relaxed, engaging and informal. It’s a great way to catch fellow lean enthusiasts or for those less active to ask questions and get to know the community.

**October Community of Practice (CoP) Event:** Intelligent Compaction with Major Road Projects Victoria’s Leon Choo.

**Future Infrastructure Summit 2023:** We are currently looking for experts in the above areas within the Australian infrastructure and construction sectors to present 18 min TED style presentations in main sessions, sit on industry panels, or possibly present workshops in the breakout areas. Please go to the [Call for Speakers](#) page to register your interest.

**South Australia Council Membership Expressions of Interest Open Now!**

Contact [admin@leanconstructionanz.org](mailto:admin@leanconstructionanz.org)

# It's Time to Bring Operational Excellence to the fore!

Stephanie Pretorius, Director LCA NZ (NZ)

The construction industry has been hit hard in recent years. COVID, lack of skill availability, supply chain disruption, cost escalation and workflow disturbance have contributed to hard times that some have not survived. The last thing the industry needs now is more pressure on financials and delivery timeframes in the current environment. What industry needs is a way forward that will deliver financial sustainability, improved performance and better outcomes overall.

Historically Construction has shied away from what I'll call wide scale continuous improvement programmes. Common obstacles are lack of knowledge, lack of relevant industry examples, and the costs of resourcing improvement initiatives. **It's an unbalanced equation if the benefits of continuous improvement are not clear. How do you put a dollar value on a culture of discipline and accountability?** The value of culture change, effective processes and root cause problem solving across your organisation is unmatched, but hard to put into a business case when cost-benefit decision making rules the day.

There has been so much pressure to deliver and do it as fast as possible, there has been no room for focusing on improvement. Business as usual has ruled the day - meeting deadlines and getting the job done prioritised over expending energy on organisational learning.

Efforts to help the Construction industry have included "lean" methods and tools. Yet there is a shortage of resources from the continuous improvement field that have experience in driving CI Programmes in the construction industry.

The application of lean concepts from Toyota and automotive has gelled well in manufacturing. Construction requires something more. Last Planner has been a focus for many in "lean" however this is still only part of the story.

What construction needs is an absolute focus on Operational Excellence. Interventions that are aimed squarely at improving the value add of delivery. Delivery is where the magic happens. The transformation of needs into plans into delivered work. Anything that creates disruption to this flow is an obstacle to value add and must be identified and eliminated. This includes the role of clients, contract structures and competitive bidding processes focused on lowest cost.

We need focus on long term capability growth across the industry. We need to be in a place where we are competing on Capability - on the ability to add value, plan it well, deliver it on time and efficiently, for a fair rate that recognizes risk. The incentive to drive capability growth is long-term financial sustainability. No other focus will deliver more value from the same, or less, resources over time.

This is exactly where Operational Excellence steps to the fore. Operational Excellence has the potential to transform delivery performance, culture, and financial results. It requires a dedication to building the capability for getting better every day. What this means in key areas is:

- **Direction:** Clear direction is cascaded as strategy to all teams. All functions are aligned to this direction. Executable team plans are tracked to a shared scoreboard with regular cadence. Deviations to goals are identified early and action taken to adjust.
- **Processes:** The performance of core processes is a primary focus - how effective are they? Processes deliver you the results you get - period. If you're not managing your processes, you are not managing your business.
- **People:** Are your team accountable for their results? Is performance visible to all? Do your leaders manage their people well?
- **Enablers:** Do you have a CI capability? Can your team solve problems, or do they relive them every day? Do you have the information to drive root cause interventions?

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The industry is distracted. The pressure of immediate delivery needs, problems with unfair contracts, constantly changing schedules, and resources not being available. Too busy to see that enabling continuous improvement is how you begin the process of identifying obstacles to delivery on time, on spec and on cost, and systematically eliminating them one by one. Yes, it takes time to make progress. It requires focus and consistency of effort. But it is much worse to be treading water or even going backwards.

Operational Excellence provides the structure and the roadmap to continuous improvement. It is time to bring Operational Excellence to the fore and commit to the business of becoming better daily at your core work. Time to move to learning from mistakes instead of reliving them. Operational Excellence is the way forward to rising above stress, rework, and variable performance to becoming the best version of your organisation possible.

Stephanie Pretorius, Director LCA NZ (NZ)

**CASE STUDY: TIDY SLABS**

Mastering the art of improving by 1% every day sounds like a great idea that any business leader should strive for. But how does it work? How do you make your business more than just a company value, a poster on the wall or a thing that people are told at their orientation, but later forget?

Simply put, it is a journey, and you must start somewhere. As the saying goes, "How do you eat an elephant? You start with the first bite."

We took the first bite of our LEAN journey in 2018 with a 'Better by Lean' grant from Callaghan Innovation, facilitated by Intent Group. Although it felt like a big deal at the time, this was only a very small taster of the journey to come. The road to date has not been perfect with plenty of setbacks and lessons throughout, but I believe this process is the whole point. In a nutshell, the PDCA cycle is at play.

We are a foundation contractor with our home base in Wellington, servicing the Lower North Island and Auckland markets. We specialise in the delivery of high-volume foundations for residential clients where consistent delivery is of the greatest importance. Our goal is to bring the "production line" to the field by systemising something that is inherently variable - residential construction, specifically concrete and delivering absolute consistency for our clients.

Four years later, here are the simple wins as I see them. Excuse the pun, but this is the foundation for our LEAN journey to continue for generations ahead.

- Standardised Meeting structures
- 5S of our yard/sites/ vehicles
- Focus on productivity metrics to drive decisions

These simple yet effective ideas have set us up for success. Although we have wavered in our effectiveness as we learn to adopt these tools, they have evidently helped bring clarity and focus to our business.

Importantly though, what has been gained in the organisation's DNA over these four years is the knowledge that for any system, process, or method of continuous improvement to be effective, it requires committed and capable leaders, with the right resources and empowerment to make a change. The drive to be better, to deliver better results for our clients and then actually doing it, this requires a culture change. It also requires the mindset of a never-reachable destination.

We feel like we are still digesting the very first bite of our elephant but are so grateful to have started the meal. Thank you Intent and thank you, Callaghan. Most importantly, thank you to our clients and our committed team.



Andy Garvie, Managing Director, Tidy Slabs Ltd

<https://www.tidyslabs.co.nz/>

# Leveraging Last Planner & Getting Things Done

Phil Hendy, Director LKANZ (VIC)

While David Allen's Getting Things Done is well known for improving personal productivity, the Last Planner System has proven to increase the productivity of our project teams. Our latest blog compares the two systems and explains how lean construction leaders can use them to achieve better results and reduce stress.

## Article Summary

Two systems you can use to increase productivity and reduce stress in the increasingly complex world of construction.

Why Last Planner System (LPS) & Getting Things Done (GTD)?

People who join the construction industry from other industries are often bewildered by our absence of systems and tools to effectively control detailed production and operations. Our history has seen us evolve with little regard to such matters. The significance of this gap is highlighted by the fact that our ever-challenging projects are more likely to take longer and cost more than estimated.

The Project Management Institute has a "significant gap in the current framework [with] the lack of consideration for how and where work will be performed." (Project Production Institute, n.d.). There is a need for systems and tools to effectively manage production at the 'shop floor' day to day level. LPS and GTD are two emerging systems that can be leveraged to drive efficiencies in daily construction activities, improve our industry culture and provide long-term sustainable change to our industry.

[Read more...](#)

## Board Member Profiles



**Michael Ward**

LKANZ LTD BOARD CHAIRPERSON, LKANZ NSW REGIONAL COUNCIL



**Ken Panitz**

LKANZ LTD DIRECTOR, PUBLIC OFFICER



**David Whatmough**

NSW REGIONAL COMMITTEE CHAIRPERSON



**Stephanie Pretorius**

LKANZ LTD DIRECTOR, NZ REGIONAL COUNCIL



**Shang Gao**

LKANZ LTD DIRECTOR, VIC REGIONAL COMMITTEE



**Phil Hendy**

LKANZ LTD DIRECTOR, VIC REGIONAL COMMITTEE



**Christina Levinson**

LKANZ LTD DIRECTOR, QLD REGIONAL COMMITTEE CHAIRPERSON



**Andrew Ng**

SOUTH AUSTRALIA REGIONAL COUNCIL

**Our mission is to promote and support higher levels of sustainable performance in the Australian and New Zealand Construction Sector.**

Our development objectives to be progressively implemented include:

- Lean Training and Accreditation
- Lobbying body for Lean and Collaborative Contracting
- Body that sets the Lean Standards for AUS and NZ
- Research and research summary
- Community of Practice on all levels
- Lean Awards

# Investigation of the Construction Supply Chain Vulnerabilities Under an Unfavorable Macro-Environmental Context

– By Shir RosensteinSaeedi, S., Koohestani, K., Poshdar, M., & Talebi, S. (2022). Investigation of the Construction Supply Chain Vulnerabilities Under an Unfavorable Macro-Environmental Context. Proceedings of the 30th Annual Conference of the International Group for Lean Construction (IGLC30), 784–795. doi.org/10.24928/2022/0190

Original whitepaper by:

Summary by: Dr Mani Poshdar, Auckland University of Technology

In today's tough economic climate, it is important that the construction industry remains competitive and dynamic. It relies heavily on materials and services often sourced from numerous suppliers. Supply chains are complex and require careful management to ensure that products arrive on time, with the right quality and value for money. They are vulnerable to threats from all directions, but certain threats can be identified as high priority by managers. These priorities can significantly change in an unfavourable macro-environmental context such as a social, economic, or political crisis.

While lean construction can be useful in dealing with supply chain vulnerabilities, it also has some drawbacks. On the plus side, lean construction can help keep supply chains flexible and responsive to changing conditions. For example, lean construction principles emphasise eliminating waste and inventory, which can improve responsiveness to disruptions by reducing the amount of work-in-progress (WIP) inventory that must be re-routed or scrapped when there is a disruption. This reduction in WIP inventory also helps to minimise costs incurred by delays due to disruptions. However, minimising inventories and relying on supplier relationships can also reduce the system's resilience. A company may not have enough flexibility if one supplier goes out of business or is unable to deliver products as expected. In other words, if there are no inventories, an unexpected event such as a supplier failure or disruption will have a greater impact on supply chain performance. Therefore, it is necessary to recognise the changes in the priority list if a disaster hits and select the appropriate lean construction method accordingly.

This paper reviews 120 publications on supply chain vulnerabilities published since 2000. It compiles lists of vulnerabilities based on a thematic analysis. In order to identify the general perceptions regarding the significance of the identified vulnerabilities, they design and distribute questionnaires to various trades within the construction industry. Respondents were selected from individuals who had experienced macro-environmental challenges, such as political upheavals and pandemics. As a result, researchers could examine how priorities might change when macro-environmental conditions are unfavourable.

The results indicate vulnerabilities such as fluctuations in prices and exchange rates, volatility in supply and demand, and financial concerns may become more prominent under unfavourable macro-environments. Consequently, the paper suggests that managers may be inclined to focus more on methods such as the Last Planner System and value stream mapping in such situations.



# Aligning Collaborative Project Behaviours - using Laboratory methods to identify how to incentivise collaborative relationships

Mani Poshdar, Auckland University of Technology

## Abstract

In Lean Construction, human behaviour plays an instrumental role in the success of projects. The social systems must therefore be examined rather than making assumptions or expecting changes merely from adopting certain tools or techniques. Putting assumptions to the test in a controlled environment can introduce unexpected twists.

This article discusses the importance of using laboratory methods to measure human behaviour. In a small-scale experiment at Auckland University of Technology, this technique demonstrated the potential to support human resource management decisions. Among the approaches used in the test were the traditional management model (in which entities act independently) and the alliance model (in which participants collaborate to achieve a goal).

The test measured individuals' performance based on the highest earnings in the allocated budget, incorporating the time factor. Four sessions were conducted, and all actions were recorded. Observations showed that the traditional approach promoted social exchanges between participants at their lowest levels, whereas, under the alliance approach, two-thirds of participants appeared inclined to maintain positive relationships with others.

From a human resource management perspective, if these participants were given tasks to complete, one-third of them could be expected to prefer maximising their utility over the team's utility. At the same time the results from the experiments could help the efficiency of the professional development plans by specifying the points of developments. [Read full article more...](#)

## LCANZ Memberships: How to get Involved

The construction sector in Australia and New Zealand exhibits a high incidence of project cost and time overruns, business insolvencies and stagnant productivity.

Applying lean construction principles in your organisation or even as an individual contributor offers a way to enhance project success and increase the likelihood that projects will be more collaborative, have less wasted effort and deliver appreciable customer value.

If you are interested in attending our webinars, community of practice events or want to become a member, visit the [LCANZ website](#) for more details. Student and Individual Membership start at just \$200/year.

Membership benefits include:

- Reduced rate for thought leadership events
- Access to LCANZ webinar library
- Lean site visit member rate
- Reduced rate for training ... and more!

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