LAST PLANNER® SYSTEM IMPLEMENTATION HEALTH CHECK

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AIM OF THE STUDY

Based on previous studies & this research there is a need to develop a Guideline and IHC to assist consistent LPS implementation across all projects by asking three research questions:

1) How is LPS implemented in projects;

2) How can implementation of LPS be improved; and

3) What are the possible effects of the improvement measures.

CONTEXT OF THE STUDY

- '…consistency of implementation of LPS varies'   (Ebbs et al., 2018;Hackett et al., 2019)

- '…little attention has been given towards developing a plan or roadmap for integrating LPS into a project'
(Daniel and Pasquire, 2017)

- '…adoption of a standard approach is advised'   (Daniel and Pasquire, 2017, p.16)

- LPS *'…is a series of interconnected parts. Omission of a part destroys the system's ability to accomplish its functions.'*
(Ballard and Tommelein, 2016, p. 60) .

RESEARCH DESIGN

Qualitative in nature
Mixed-methods approach
Case study design
Sequential explanatory approach
- Thematic analysis
- Triangulation
- Action research

Integrative Literature Review
Project documentation review
Purposeful interviews
Develop Guideline & Health Check
Health Check pilots
Post-pilots focus group workshop
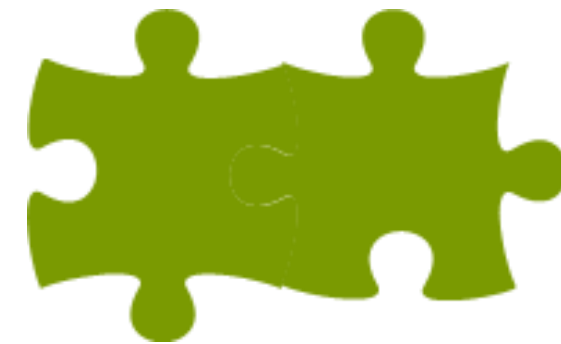
FINDINGS

Unaware of advantages from using all LPS functions

LPS support & resource are focused on selected projects

Lack of focus or ownership

Poor trade partner engagement

Full implementation not mandated

Selection of individual functions

Owner's resistance

Lack of LPS understanding

Absence of standard implementation process

TABLE 1: RESEARCH SOURCES FOR HEALTH CHECK

| Source	Key Points
Ballard and Tommelein (2016, p.61) 'Current Process Benchmark…'	'Functions are the proper work of the system, its jobs. 1) Specifying what tasks should be done when and by whom, from milestones to phases between milestones, to processes within phases, to operations within processes, to steps within operations. 2) Making scheduled tasks ready to be performed 3) Replanning/planning to complete, to achieve project objectives 4) Selecting tasks for daily and weekly work plans—deciding what work to do next 5) Making release of work between specialists reliable 6) Making visible the current and future state of the project 7) Measuring planning system performance 8) Learning from plan failures.'
Daniel and Pasquire (2017) 'LPS Path Clearing Approach'	Step Actions at the Project Level. Table 1: Production planning and control practice (Planning Best Practice). Table 2: LPS implementation assessment questions.
Ebbs and Pasquire (2019) 'Facilitator's Guide'	Appendix 3: LPS Facilitator Checklists Appendix 4: Felipe Engineer's LPS Guide Appendix 5: Study Action Team™ Guidance for Facilitators Guide to the Last Planner System

IMPLEMENTATION HEALTH CHECK & TRIALS
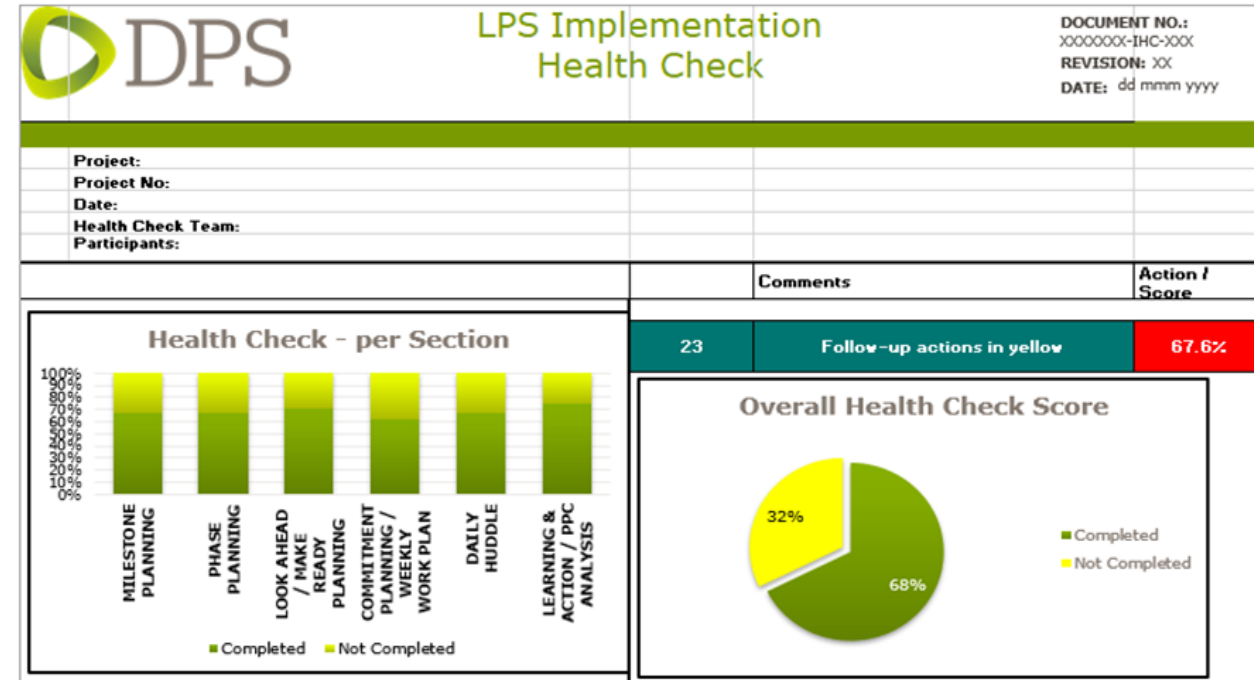
Figure 1. Implementation Health Check

38 prompts or questions across six 'functions':
'Yes' would confirm its application;
'No' would highlight area for improvement
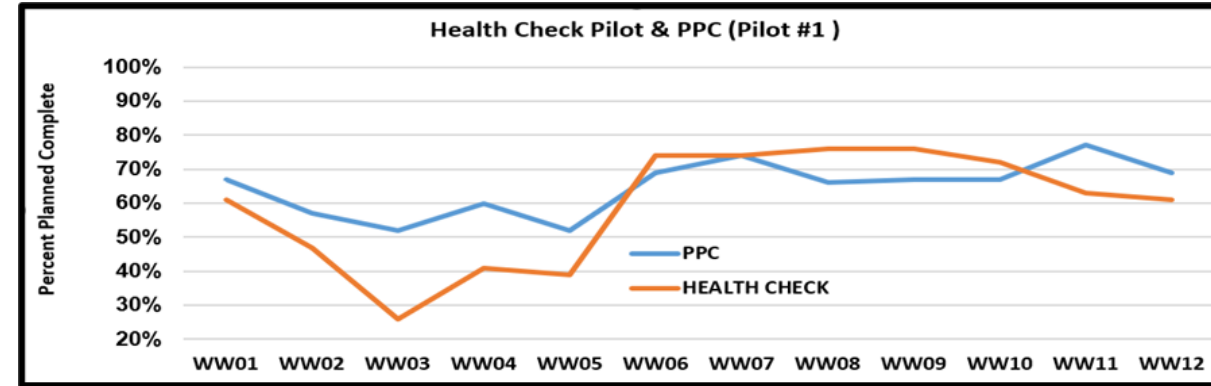
Figure 2. Pilot #1 results
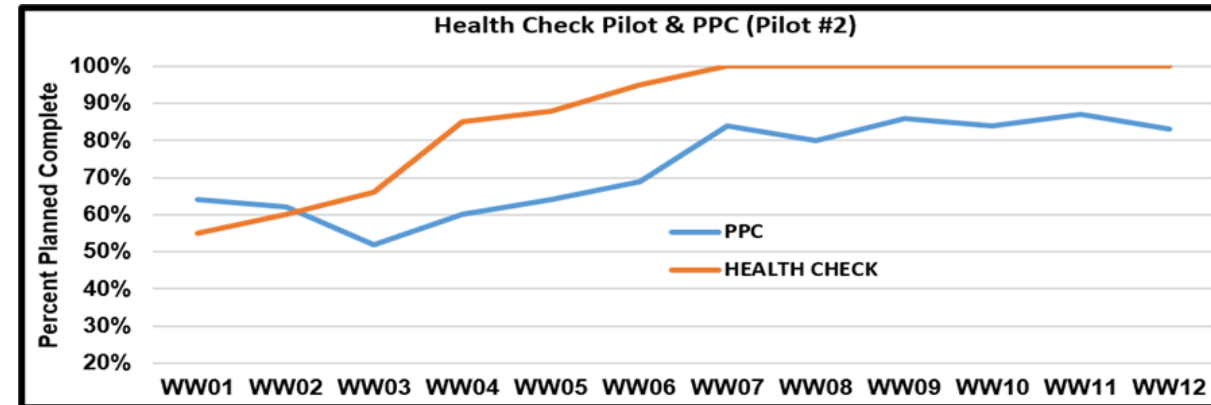
Figure 3. Pilot #2 results

POST-PILOT LEARNINGS

- Must be desire and a will to make LPS succeed
- Senior management & site leadership support is critical
- Facilitation at early stages is a key enabler.
- Education and training to show benefits of LPS.
- A longer-term view of LPS required.
- Health Check is a critical implementation effectiveness measurement tool

CONCLUSIONS

Diligent implementation of all functions of LPS allied to continuously improving the process delivers better results

Construction should strive to standardise its processes (like the IHC introduction) and adopt a 'process improvement' view and mindset.

Successful LPS implementation necessitates deeper consideration of how people think, communicate, engage, commit, and collaborate.

THANK YOU!

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