

Moving Beyond Obsolete Theory

Conducting Projects as Networks of Commitments with The Last Planner System®

Hal Macomber and
Gregory A. Howell, P.E.

Why the Interest in Theory?

To explain past behavior,
predict future behavior, and
to improve results.

Obsolete Project Theory

According to Koskela and Howell, in their research paper for the PMI 2002 Research Conference, underlying theory fails us:

- Reductionism – understand by decomposing
- Determinism – the future is unknowable
- Transformation Model of Work
- Thermostatic Control – one point for adjusting
- Fredrick W. Taylor's *One Best Way*
- Henri Fayol proposed the subordination of individual interests and specialization of labor
- Henry L. Gantt's chart ignores customers and performers

Last Planner System® (LPS)

- Created over 15 years ago by Glenn Ballard, Ph.D. and Gregory Howell, P.E. to improve the productivity of construction operations
- Refined to become a comprehensive project delivery system – planning, execution, and control
- While it has its roots in production system theory, its performance depends on the quality of the human system – the project organization
- Lessons of LPS apply across project types

Registered trademark of the Lean Construction Institute, www.leanconstruction.org

LPS Historical Emphasis

- The practitioner community continues to use the language of the materiel world
 - 'Activity' rather than promised result
 - Input-process-output (transformation model)
 - Tools and material rather than customers
- Distracts people from the human-ness of the project
 - Work arises in conversations

Planning and Promising

Unless commitments are made,
there are only promises and hopes...
but no plans.

-- Peter Drucker

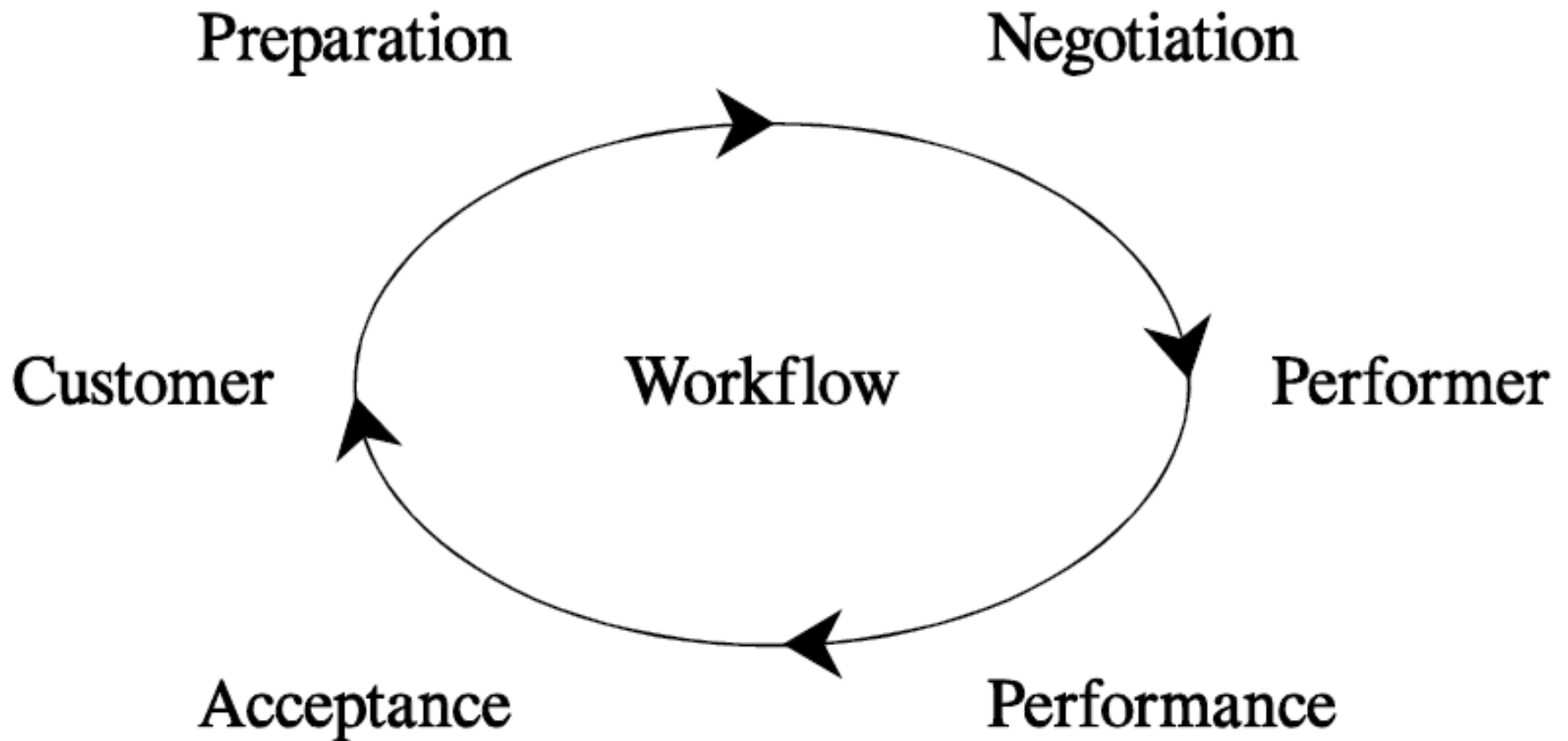
Language-Action Perspective

“The work of organizations is making and keeping commitments”

-- Fernando Flores

- A project is a special-purpose organization for fulfilling a promise(s) to a customer.
- That organization functions as a *network of commitments* where the promises of individuals are connected to the promise to the customer.

Action Workflow



Current LPS Practices Support Making and Securing Reliable Promises

- Phase Planning produces a set of proposed requests in a relative sequence that supports the overall promise to the client
- Look-ahead Planning prepares those requests removing any impediments (constraints) to making a promise
- Weekly Work Planning provides the setting for making promises reliably and reviewing performers results in keeping prior promises

Goal: Uninterrupted Flow

- Work proceeds from one value-added step to another value-added step without delay
- Compound effects of dependence and variation impact the ability of proceeding without delay through a *workstream* of different performers
- Reliability of completion allows tighter coupling of one task with another
- LPS provides the context and setting for tightening up the workstream

Learn from Winnie the Pooh

“Here is Edward Bear, coming down the stairs now, bump, bump, bump, on the back of his head, behind Christopher Robin. It is, as far as he knows, the only way of coming down the stairs, but sometimes he feels that there really is another way, if only he could stop bumping for a moment and think of it.”

A.A.Milne, Winnie-the-pooh, 1926

1: Project Won't Go as Planned, but Plan Anyway

- Sequencing makes a difference
- Planning is preparation for the last planners (planner-doers) to recognize and act on the unexpected
- Planning and re-planning collaboratively builds a context for taking better care of the client concerns

2: Specialization Introduces Gaps and Overlaps

- Bridge contracts by eliciting performers' commitment to the promises made to the client
- Connect the promises of individuals to the promise to the client
- Breakdowns are interruptions to commitments
- Without a promise there can be no breakdown
- Have recurring conversations for alignment to keep the client promise present

3: Uninterrupted Flow Requires Performers Are Ready for Each Other

- Promise publicly; re-promise as necessary.
- Have conversations daily to update each other on your promises; get help as needed.
- (Pre)Announce the completion of your promise to ready the next performer to mobilize.

4: Life Is What Happens After We Make Plans (Promises)

- Extend responsibility for assessing opportunity and jeopardy throughout the project organization
- Invite performers to declare breakdowns beyond their direct area of accountability
- Authorize performers to initiate compensating actions in full view of others on the team

5: We Don't Act on What We Don't Notice

- Projects (and life) are too complex to catch all of what needs catching
- Use systems to record promises in the making and to bring attention to pending promises
- Use systems to measure performance to guide learning and improving
- Prepare performers by including them in planning conversations

LPS: Managing Commitments

- The Daily Coordination Meeting is the setting for managing commitments among project performers (Last Planners)
 - *Report complete* on promises due
 - Renegotiate promises
 - Make good on broken promises
 - **Provide help**

3 Keys for Uninterrupted Flow

1. Project performers continuously update their promises and declare complete
2. System that calls attention to what action is required to keep the promises that are outstanding
3. Development of the project organization so people are in a position to declare breakdowns and initiate compensating action.

Five **Big** Ideas Changing Project Delivery

1. Conduct project work in a network commitments
2. Tightly couple learning with action
3. Increase the relatedness of project participants and constituents
4. Collaborate, really collaborate
5. Optimize the whole, not the pieces

Respect the autonomy, endless ingenuity, and good intentions of people

Join the Reform of PM

- Reforming Project Management
www.reformingprojectmanagement.com
- Let's Play Catch!
www.letsplaycatch.com
- Project Kaizen
www.projectkaizen.com
- Agile Project Leadership
www.agilemanagement.net
- Art of Project Management
www.scottberkun.com/book/artofpm/