



CLUSTER GROUPS (PROJECT IMPLEMENTATION TEAM)

1.0 Why

Building projects are complex in terms of systems that work together, multiple companies that interact, and multiple budgets integrated in the overall development budget. Many decisions must be made when developing and delivering a project that meets all of the Conditions of Satisfaction (CoS).

Cluster Groups break up that complexity into an environment of rapid prototyping of solutions and rapid learning through out Distributed Leadership.

It is unlikely that one or a few individuals can make all necessary decisions. Volume of issues, technical skills, input needed, code knowledge, awareness of options, and the ability to study the most appropriate solution would overwhelm a small team. A Lean/IPD project uses Cluster Groups to better manage this arduous task.

Cluster Groups break up that complexity into an environment of rapid prototyping of solutions and rapid learning through out Distributed Leadership. The teams share cross-functional knowledge for problem solving; together they understand the ripple effect of decisions and can therefore make better-informed decisions with less iteration. The Cluster Groups come together in a Big Room environment to share and learn from other team members or clusters. Cluster Groups are most often used as part of Target Value Design (TVD). Through the use of A3 thinking, Choosing by Advantages and set-based design, these clusters can improve predictability while driving value to the Customer.

A single person or company should not design a solution alone, without representation from other project participants. Cluster Groups are powerful because they can get input from many other perspectives—and thus benefit the project.

2.0 What

Cluster Groups are unique and specific to individual project needs. Cluster Groups also change with the needs of the project. They are not all intended to last the entire duration of a program but instead are centered around a body of work to be delivered. Not all projects have Cluster Groups. Small projects may be a Cluster Group in and of themselves. The intent is to batch the work into manageable pieces so the work can progress smoothly and reliably. Small projects may be able to manage this effort as one cluster overseeing all activity. The number of Cluster Groups required for a project will depend on the project's:

- Scope/Size
- Complexity/Constraints
- Risks

Cluster Groups must be multi-disciplinary. Regardless of the topic of the Cluster Group, it will typically be comprised of an owner rep, an end user, an architect/designer, a GC/CM, and a specialty trade contractor. The size of the group should be manageable yet still comprise a broad representation of stakeholders. Teams with high levels of trust allow one member to represent a multitude of stakeholders; this arrangement helps reduce cluster size. Individual team members must be empowered to make decisions on behalf of their company, scope of work, or area of influence. They must also understand their boundaries of decision-making to keep the teams right-sized. Each Cluster Group should have an estimator or person to report to the overall project budget.



A single person or company should not design a solution alone, without representation from other project participants. Cluster Groups are powerful because they can get input from many other perspectives—and thus benefit the project.

3.0 How

Clusters should be formed around whatever grouping is appropriate to the project. Examples include:

- Building system
- Department type
- Discernable chunk of structure or scope
- Subject matter supporting the CoS (environment, community, culture, etc.)

The project team collaboratively forms the groups; the groups must not be dictated by a single person or company. Each Cluster Group defines the objectives and captures innovative ideas that it will bring to the project. They take a deep dive into the body of work they were designated to form around. In a TVD structure, they will often respond to a particular budget goal as well. All Cluster Group goals, ideas and strategies need to be integrated into the Project Team Pull Plan. This will ensure that the team makes decisions at the right time, and that the effect of those decisions on other Cluster Groups and project teams is considered. It's best when decision-making A3 documents are used to define who leads the charge on a particular topic; the date by which the decision must be made should be captured in the A3 as well. The A3 documentation can also inform the rest of the project team about what the individual Cluster Group is working on. All A3s should be accessible and visible to the project team.

Cluster Groups may find it appropriate to work separately from the larger team for various efforts. Their focus of work could demand a location, technology, and intensity that happens outside the Big Room setting. It is essential, however, that Cluster Groups interact regularly. This intentional interaction is the reason for the Big Room to exist. To facilitate this interaction the team may need to use techniques and tools such as:

- Big Room Agenda
- Speed Pulling: Purposeful scheduled time slots of interaction between Cluster Groups

The Pull Plan informs what the Cluster Group will be working on; the Cluster Group responds and informs the pull. But the goal is to pull the work from the activities or decisions to be made, not meet for the sake of meeting. Parkinson’s Law states: “Work expands so as to fill the time available for its completion.” That is not the intention of Cluster Groups. Cluster Groups are cross-functional teams that complete focused work based on a deliverable established by pull. The use of Restropectives and Plus/Delta can help inform the value of these work sessions.

The Cluster Group will evolve and even disband as a project progresses. Group members may be added and deleted as the deliverables change. If there are no remaining deliverables outlined on the pull for the Cluster Group, then the group may have no further need to exist. As a project enters construction phases and issues arise needing the expertise of multi-disciplinary team members, a Swarm can take place at the site of the work to deal with that singular issue.



Quick Reference

Distributed Leadership	83
Conditions of Satisfaction	133
Big Room	209