How To Leverage JOB ORDER CONTRACTING & Lean Construction Methods

6 Reasons to Use the OpenJOC™ / OpenCost™ Approach

Delivering better facilities through [LEAN Construction](#) requires improved Owner[1] leadership and competency, the collaboration of all stakeholders, financial transparency, longer term and mutually beneficial relationships. Improving the financial and operational performance of facilities is key to increasing overall productivity and can measurably impact the bottom line. However to achieve better results, owners must become more involved.

Traditional construction delivery methods (e.g., design-bid-build and lowest-bidder) and newer methods (design-build) are not up to the task. Ultimately, these methods fail to integrate the unique variables of each construction project.

Lean Construction Basics

LEAN construction delivery provides a process framework to improve outcomes. When LEAN is properly implemented, more than 90% of projects (renovation, repair and new construction) can be delivered on time, on budget and to the satisfaction of all parties.

Many business sectors have successfully applied LEAN processes, most notably auto manufacturing. LEAN processes propelled the productivity and quality advantages Henry Ford achieved and Japanese automakers later advanced. Software development, electronics and process industries also

CONSTRUCTION COST DATA
2017 & Beyond

OpenCOST™ Construction Cost Methodology

4BT™
OpenCOST

THE OPENCOST™ APPROACH INCORPORATES

SIGNIFICANT IMPROVEMENTS INTO THE

COLLECTION, VALIDATION, USE, & MAINTENANCE

OF DETAILED LINE ITEM UNIT PRICE

CONSTRUCTION COST DATA.

---

[1] Owner – Real property owner, facilities management, and oversight groups.

have attained major improvements.

The LEAN Core

The LEAN construction method requires all participants, including all external providers and internal actors (finance, real property, design, engineering, operations and maintenance, personnel, purchasing/procurement and building users) to collaborate. Focus is upon the needs of the customer, better education and early and ongoing communication. Owners typically have promoted and led successful LEAN implementations in construction, according to authors James Womack and Daniel Jones in Lean Thinking: Banish Waste and Create Wealth in Your Corporation.

Features of the LEAN approach include:
• Early and ongoing involvement of participants and
   stakeholders
• Best value selection
• Collaboration
• Mutual respect and trust
• Common data environment
• Financial transparency
• Shared risk/rewards
• Performance-based reward system
• Long-term relationships
• Enhanced leverage of localized knowledge
• Global oversight/leadership
• Competent leadership without excessive
   management and control
• Continuous improvement / ongoing training

LEAN Construction Process Embedded in [Cloud Technology](#) Solution Saves Money & Monitors Compliance

Though not itself the primary driver, technology is important to consistent LEAN construction delivery. Too often, organizations view technology as the solution rather than a tool. Technology should support established organizational objectives and change-management activities.

Cloud-based technology that a supports common data environment (CDE), data architectures (CSI MasterFormat, etc.), and [locally researched cost data](#) are good starting points.

LEAN contracting puts the value on relationships over the formal terms of a contract. The relationship approach maximizes collaboration among the many stakeholders throughout the life cycle of a construction project.

Integrated Project Delivery (IPD) and [Job Order Contracting](#) (JOC), which are construction delivery methods as well as procurement, are the most common forms of LEAN construction. IPD is reserved for major new construction projects, whereas JOC is deployed for renovation, repair, maintenance and minor new construction projects.

Phases of JOC Task Order

To help illuminate the lean construction method, here are the specific phases of the JOC task order life cycle:

PHASE 1 Owner establishes a current construction need, determines preliminary budget and confirms funding availability.

PHASE 2 Owner team (technical/facilities management, JOC program/project manager, contracting/purchasing or building user) conducts a pre-proposal meeting and drafts a JOC task order signed by the JOC contract administrator.

PHASE 3 Owner team and JOC contractor make a joint site visit and confirm work scope, site conditions and any unusual requirements.

PHASE 4 Owner creates an independent, detailed, line-item cost estimate.

PHASE 5 Contractor creates estimate. (Both owner and contractor use the contract-required unit price book.)

PHASE 6 Contractor submits a task order proposal/estimate. Owner compares it to independent owner estimate.

PHASE 7 Owner and contractor negotiate a review of any variances or conflicts with the JOC program. There are three possible outcomes: 1) Owner issues a notice to proceed (NTP) to contractor; 2) Owner issues specific changes or requests additional information; or 3) Owner cancels task order.

PHASE 8 A project kickoff meeting takes place and the worksite is handed off to the contractor.

PHASE 9 Owner conducts weekly site visits and reviews progress reports submitted by the contractor.

PHASE 10 Project closes out with a final package of warranty and maintenance information as specified in the JOC operations/execution manual.

The cloud's benefit

Everything at your fingertips at any time wherever you are.

Multi devices

Building in Cloud is available on any of the following devices: PC, Tablet or Smartphone

Life cycle

Designed to allow maximum collaboration during the entire building life-cycle

Project Management

Building in Cloud supports all building management phases allowing the designer, the builder and the owner to stay up to date and share the same information

Unit Price Book & Estimating

Verifiable, fully researched and localized detailed unit price cost data, by Facility Managers for Facility Managers™.

Document Management

Building in Cloud lets you share documents while keeping track and recording all revisions made.

Also known as IPD-lite, Task Order Contracting (TOC) and Simplified Acquisition of Base Engineer Requirements (SABER), JOC is a project delivery method utilized by organizations to get numerous commonly encountered construction projects done quickly and easily through multi-year contracts for a wide variety of renovation, repair and minor construction projects.

JOC is most commonly used to clear deferred maintenance backlog, perform rapid-response recurring project needs and construct minor renovation projects.
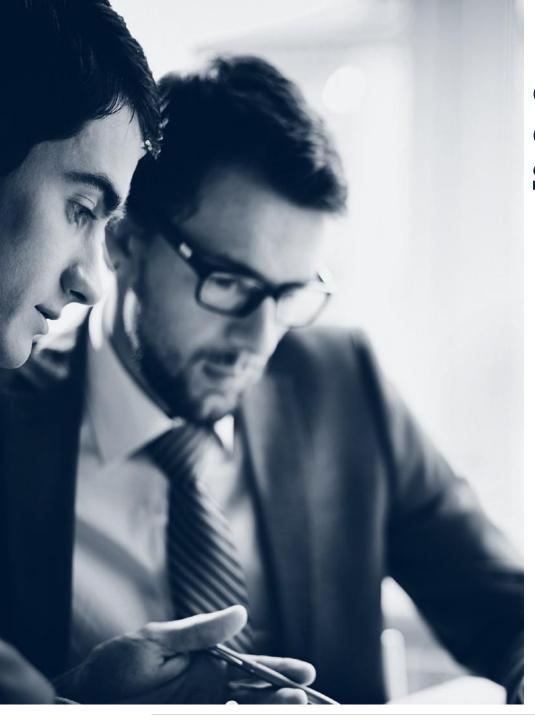
These and other forms of best-value collaborative methods provide frameworks for lean construction implementation and a path to better outcomes. Owners that are capable of leading lean construction environments are better positioned to collaborate.

.

Few organizations are managing productivity and quality for facility renovation, repair, sustainability, and new construction project to the degree they could be.

Hurdles to Leveraging
LEAN Construction & Cloud Solutions

Less than 5% of organizations leverage LEAN construction delivery best management practices. Here are some reasons…

- Many still think the old method of using spreadsheets Is good enough.
- Some are collecting information electronically, but using a handful of old applications that only work in silos.
- Many simply do not understand the ripple the core aspects of LEAN – collaboration, win-win outcomes, continuous improvement, common data…
- Few understand the criticality of everyone using common terms, definitions, and data architectures (CSI MasterFormat, Uniformat, and Ominclass).
- Many fear sharing information, especially financial transparency.
- Lack of understand of the Cloud in terms of security, access, and/or privileges.

FOUR BT, LLC   WWW.4BT.US   INFO@4BT.US

Cloud-based LEAN Construction / JOC Solution

1. Instant access to data. The latest construction cost estimates, drawings, issues, or reports are available without any bottlenecks. Overall project delivery times reduced, including critical path activities such as:

- Requests for Proposals
- Joint Site Visits
- Contractor Detailed Estimate Creations
- Estimate Reviews & Negotiations
- Issuance of Notices to Proceed
- Job Mobilization
- Daily Inspections
- Punch Lists
- Close out package

2. Standardize processes and reports across the enterprise and among service providers. Owners, contractors, and oversite groups are all using the same common data environment and technology.

- Appropriate views and privileges assure everyone is speaking the same language.
- Data no longer being located in silos in individual apps

3. Locally researched detailed unit price cost data assures full financial transparency.   Not all construction cost data is created equal. While "national average" cost books and associated "localization factors" have their role in conceptual estimating, there is little room for error in estimates for actual renovation, repair, or construction projects. Having access into current, actionable cost data across projects (rather than just a single project) means owners and contractors can better…

- Prioritize projects and resources.
- Monitor performance.
- Schedule projects in stages for more efficient, quality-controlled construction.
- Valid subcontractor/contractor proposals.
- Meet compliance regulations for financial transparency.

4. Leverage key performance indicators to pinpoint issues and leverage successes. . Having access and insight to detailed line item costs, project timelines, spend rates, etc. across single and multiple locations, project types, and contractors can…

- See which suppliers have had problems with either delivery or quality.
- Perform trend analysis to see which suppliers are top performers.
- Avoid small mistakes turning into massive costs.

5. Archive and distribute required historical or current data, documents, or images to project stakeholders. All participants can access virtually any format of data and take a more proactive approach.

- Information and reports are available to anyone with access to the cloud and appropriate credentials.
- The reports can be run enterprise-wide to give stakeholders greater visibility and insight rather than project-by-project.
- All forms of documents (Adobe PDF, Microsoft Word/Excel) and drawings can be viewed (DWG, JPG, TIFF, PNG, RVT...)

6. User tasks and incident reporting. Appropriate forms can be accessed via computer, smart phone, and tablet to post tasks and incidents. Internal system notifications eliminate problems associated with email

- Appropriate workflows and sign offs can be incorporated.
- Documents the incident reports with photos can be immediately posted and time stamped.
- Automatically updates any changes to forms enterprise wide.

FOUR BT, LLC   WWW.4BT.US   INFO@4BT.US