Project Management Teams

Programmed for Success

C. C. Myers, Inc.

- Project success is most often the result of talented, engaged and committed project management teams.
- All projects of all kinds require competent project management to reach successful completion.
- Leadership excellence in project management expands a company's ability to obtain work and complete it profitably.

What's important to know about Project Management..,

- Framework for Successful Project
 Management
 - Consists of a number of definitive steps
 - Requires communication and planning
 - Requires focus and maintenance
 - Is worth the effort
 - Continues to add value for the company on an ongoing basis

How do you get there?

Challenge:

- Cut free a section of the San Francisco-Oakland Bay Bridge, slide it out, and slide a new, preconstructed section into place to put traffic onto a new bypass
- Do it 125 feet in the air
- Complete the work during a closure from 8PM Thursday to 5AM Tuesday over 2009 Labor Day Weekend

An example of Project Management in Action

- How Project Management made the difference
 - Involved the right skill sets to analyze the challenge (internal and external advisors)
 - Focus on the goal and defer non-critical work (demo of the existing structure occurred weeks later)
 - Having contingency plans in place
 - Caltrans' immediate accessibility for changes

An example of Project Management in Action

Outcome –

- Bridge was removed and replaced on time without any injuries or losses (not one band aid was issued) while working round the clock.
- Team consisted of a Project Manager, 2 Project Engineers, 2 Superintendents and several foreman.
- Replacement bridge was constructed months ahead of time to make sure it was sound and ready to be moved into place when needed.

An Example of Project Management in Action

- How did Project Management make the difference?
 - Pre-planning and having a minute-by-minute schedule (with contingency)
 - All parties understanding their role and expectations and explicitly stating the goals & desired outcome
 - Coordination with owner (Caltrans)
 - Providing on-site resources for staff
 - Rethinking the plan with the team inspired by understanding the goals

An example of Project Management in Action

Lessons Learned:

- Project management team was selected early in the process and worked together months ahead of time.
- Major stakeholders and subcontractors were identified and brought on board early to assist in planning.
- Project management team understood the goals and were fully aligned (safe and early completion of the project).
- Success was shared across the breadth of the company.

An example of Project Management in Action

- Framework for Successful Project Management:
 - Analyze the Owner:
 - Reputation
 - Tough, but fair
 - Tough, one-sided
 - Management stability
 - Experienced, inexperienced
 - Relationship driven (partnering, etc.)
 - Financial structure
 - Well financed and resourced
 - Reputation for paying timely

- Framework for Successful Project Management (cont'd):
 - Analyze Project:
 - Complexity and resource allocation
 - Required resources
 - Familiarity with structural approach special circumstances and/or specialized construction requirements
 - Schedule & Logistics
 - Time frame
 - Actual Dates (required start and end dates)
 - Actual Length of project in weeks / months / years
 - Amount of time available for planning ahead of start or ahead of start for each critical path item.

- Framework for Successful Project Management (cont'd):
 - Analyze Project: (cont'd)
 - Location
 - Actual physical location and access
 - Distance from physical resources needed to build the project
 - Distance from management offices and support staff.
 - Establish a resolution process ahead of time
 - Create and agree to a formal partnering framework with all parties

- Framework for Successful Project Management (cont'd):
 - Analyze Project Partners & Stakeholders
 - Available labor force, subcontractors, suppliers
 - Accessibility to project
 - Qualified and available work force
 - Quality of product, delivery and installation
 - Designers & Engineers
 - Reputation
 - Skills & experience in the industry and project type
 - Ability to deliver timely information and reviews
 - Public
 - Is this a controversial project?
 - What are the perceived benefits?
 - How much public interaction is required?

- Assess existing core project management team members
 - Availability
 - Who is available
 - When will they be available and
 - What are their logistics in terms of physical proximity to the site.
 - Experience
 - Skill sets related to project requirements
 - Experience with owner, designer, engineer or type of structure

Step 2 – Assess Existing Resources

- Assess existing core project management team members: (cont'd)
 - Opportunities
 - What opportunities will accrue to the team member by participating in the project
 - Fill resume gaps
 - Work with new and unfamiliar members
 - Be closer to home/family
 - Always ask: Do we need to add new project management team members to the company to meet the needs of the project short term and the company long term? Does this project provide that opportunity?

Step 2 – Assess Existing Resources

- Build the team before you build the project
 - Assess the size of the team required for the project
 - Project Manager
 - Project Engineers (how many)
 - Project Superintendents / Foremen (how many)
 - Project Support staff (how many)
 - Assess personality and skill set matches to meet the needs of the project & the comp
 - Strengths, gaps, etc.
 - Current training and education level (engineer, CM, FMI, certifications, etc.)

Step 3 - Build a team

- Plan, Plan, and Plan some more
 - Timing
 - Identify preferred <u>core members</u> of the project management team before providing a bid and/or proposal
 - Empower
 - Allow selected core members to build next level of team members
 - Creates additional investment in the success of the team by those accountable for the project's success
 - Allows core members to use the same tools, logic and decision making as senior management has and grow through the process.

Step 4 - Planning for Success

- Plan, Plan, and Plan some more (cont'd)
 - Define the challenge & be committed
 - 212 degrees:
 - 211 degrees water is hot
 - 212 degrees water boils and drives a steam engine
 - Intentionally exerting one more degree of effort makes all the difference
 - Commitment vs. Involvement
 - Challenge the team to be fully engaged and take ownership of the project
 - Require an project org chart with clear accountability levels and clear job responsibilities.
 - Integrate responsibilities across positions to create complete awareness of job progress and profitability at all levels and in all positions.

Step 4 - Planning for Success

- Assuring the best possible outcome for the project and the team:
 - Agree upon the metrics and implement a process that assures consistent and timely reviews and reporting on the project by the project management team members.
 - Involve all project management team members in understanding the metrics and the information developed about the project's progress.
 - Review work for quality and efficiency improvements
 - Focus on safety because it sends the "value" message (we value our people when we focus on safety)

Step 5 - Executing the Plan

- Assuring the best possible outcome for the project and the team:
 - Encourage and provide tools for effective communication:
 - Training and mentoring (informal and formal, external and internal)
 - Templates (process driven, information sharing, labor and cost reports, conference calls)
 - Lead by example (senior managers share information openly) making it safe to explore problems and concerns as early as possible in the process.

Step 5 - Execute the plan

- Challenge, again:
- I-5 "BOAT" Section Downtown Sacramento
 - "Emergency" type project based on both price and timing.
 - One of the places in America where 2 transcontinental freeways cross (I-5 & I-80)
 - Major thoroughfare for moving products and materials (trucking)

Best laid plans...,

- Freeway access to all downtown businesses, legislative offices, State Capitol, banking, theater districts, Old Sacramento historical & tourist attractions impacted.
- Major public notice provided by Caltrans, City and County of Sacramento regarding limited/no access

..., of mice & men:

- Six-week plan was based on full shut down of one side of the freeway for 7 to 10 days at a time resulting in:
 - Shortened impacts
 - Eliminated traffic next to working crews 100% of the time (major safety concern)
 - Allowed access to businesses at all times.

Sometimes what you don't know...

- Keep the revised 6-week schedule
 - Lost three days to significant heat wave bringing asphalt to over 125 degrees (outside manufacturer's guarantees for performance & strength)
- Work 2 12 hour shifts per day
- Change and/or increase equipment types, sizes and amount.
- Bring in additional supervision at all levels.

Decisions made by the team

- Additional safety personnel, equipment and monitoring added.
- Support from office staff round the clock in the field office and on-site
- Additional foremen & superintendents brought in for support
- Senior project manager assigned for more oversight.

Adding Resources to Manage Outcomes

- There must be lessons learned from both anticipated as well as unanticipated situations.
- Often, more lessons are learned from dealing with unanticipated situations..,
- Teams must formally "debrief" in detail after completing a project. Otherwise a major learning opportunity is lost.
 - What?
 - Why?
 - (And not so much, Who?)

Lessons Learned

- Close the loop.
 - Honestly and openly assess the outcome of the project when completed with all project management team members in attendance
 - Project management team members conduct the meeting and agree upon the conclusions and lessons learned.
 - Ask for a letter of recommendation from the owner.
 Maintain master file of letters for future bids.
 - Share project management team success with the rest of the company sans confidential and/or proprietary information.

Step 6 – , Close the Loop, Acknowledge & Appreciate

- Begin by acknowledging the critical value project management teams bring to the project.
 - Step 1 Analyze the Project and its components
 - Step 2 Assess project's needs
 - Step3 Build the team
 - Step 4 Plan Plan Plan
 - Step 5 Execute the Plan
 - Step 6 Close the Loop, Appreciate and Acknowledge

Benefit from the value added present & future.

Summary