Innovating for Success with Project Management Principles

Presented by:
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Discussion Layout

• Project Management Overview
• Project Management Principles
• Case Studies
• Takeaways
As a leading engineering, architecture, and consulting firm, Fisher Arnold remains committed to servant leadership supported by a broad range of capabilities.

Business focused on supporting clients in both public and private sectors providing:
- Engineering Solutions
- Environmental Stewardship
- People Development

Core Services not limited to:
- Mill Engineering Support
- Project Management
- Structural / Mechanical Design
- Thermal / Power Process Design
- Civil / Water / Wastewater Design
- Technical Assessment, Process Modeling and Optimization
- Environmental Services
- Operator Skills and Mill Leadership Development

Strategic presence in the US South to provide rapid response nationwide.
PROJECT MANAGEMENT OVERVIEW
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- **Business Feasibility** seeks to:
  - Identify a Sponsor Team, Study Team, and Gatekeeper
  - Evaluate the idea
  - Develop potential options / solutions
  - Assess and evaluate the attractiveness
  - Recommend direction by narrowing down options / solutions

- **Conceptual Study** addresses recommended direction(s) by developing more detailed scope, schedule, costs, financial return, and risk assessment.

- **Portfolio Management** assesses, aligns, and updates strategic and tactical opportunities for the organization.

- **Preliminary Design** targets gathering the detailed information required to define fully the project documenting knowns and unknowns and develop defined frozen scope with execution plans.
PROJECT MANAGEMENT OVERVIEW:
How do we define a project?

- Key activity measuring not just financial return / budget attainment but also reviewing:
  - Project Objectives
  - Success of Business Factors (e.g. customer need, environmental factors, marketing, manufacturing)
  - Government Regulations

- Assessment should seek to understand key learnings from Project Team and acknowledge:
  - Safety / Near Misses
  - Support Systems
  - Knowledge Bases / Supportive Training
  - Communications and Review Points
PROJECT MANAGEMENT OVERVIEW:
Who participates?

- Gatekeeper
- Sponsor Team
- Study Team
- Project Team
- Resource Team
PROJECT MANAGEMENT PRINCIPLES
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Project Team Organization

Initial assessment of ideas and deciding upon scope by the Sponsor Team is critical to mitigate later, costly change orders.
PROJECT MANAGEMENT PRINCIPLES

Project Communication

Between internal and external participants and varied team structures, Team Leaders and Project Managers play central role in Communications

- Plan communications early in the process for distributing information, conclusions, and performance
  - Also identify formats, method of distribution, and who should receive the various updates

- Creating a Communications Management Plan will aid Team Leaders and Project Managers by:
  - Setting expectations of the methods, formats, content, level of detail, and conventions to be used to collect, file, and disseminate project information
  - Identifying which individuals are to receive what information and in what format which can be further developed into a distribution matrix
    - Project team records and more detailed source files also are shared with the Gatekeeper to assist in maintaining project continuity and for various project reviews

- A properly set up communications plan aids all participants in reviewing key decision points and mitigates scope creep / rework
PROJECT MANAGEMENT PRINCIPLES

Scope Management

As the objective is to define a clear project scope for predictable outcomes during implementation, a process should be in place to constructively manage change.

- Poor scope definitions are often the result of:
  - Highly favorable business returns leading to sense of urgency to obtain results
  - Tight budget and constraint on engineering resources / reviews
  - Time commitment required in developing thorough scope definition / deficiencies in knowledge management systems
  - Difficulty in showing progress in traditional terms
  - Pre-existing schedule requirement (e.g. annual shutdown)

- Poor or inadequate scope definitions not only affect cost but also:
  - Disrupts project rhythm
  - Causes rework
  - Impacts schedule
  - Lowers productivity and morale of project participants

- Scope management consists of two areas: scope development and scope control
CASE STUDIES
TAKEAWAYS

• Understand the role you play to project success and associated responsibilities

• Be cognizant not to skip over Conceptual Studies to Preliminary Design otherwise project costs will escalate. Have an agreed upon scope in hand before proceeding.

• Capital is precious and in great demand. To ensure a good return, the asset should likely be in operation.

• Design philosophy is not always clear to all parties. Have discussions prior to and during Implementation with responsible parties to mitigate change orders and additional costs.
Thank you for your attention

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