PROJECT MANAGEMENT FOR SCIENTISTS

TEAM FORMATION & HIRING

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OUTLINE

- Team Dynamics and Challenges
- Excellent Project Teams
- Positive Team Environments
- Resource Needs and Skill Granularity
- Job Announcements
- CV
- Short Listing
- Interviews and Hiring Decision

INTRODUCTION

- In theory, people are perfect team players
- In reality, multiple personnel/personal issues:
 - Not working well together
 - Constant complaining
 - Unproductive meetings
 - Temporary project teams
- Need committed, cooperative work of cohesive team
- Team formation and building as important as project definition and planning

TEAM

- Team = Group of people working independently to produce an outcome for which they hold themselves mutually accountable.
- Temporary project teams formed specifically to achieve goal, afterwards disbanded
- Team requirements:
 - Individuals must cooperate to complete their tasks
 - Team produces whole product, service rather than individual components

TEAM DYNAMICS

- Weak, uncooperative team is
 - Unproductive
 - Makes project manager's job frustrating
- Negative interpersonal dynamics lead to
 - Burn out
 - Blow up
 - Quitting
- Strength of a good team
 - Crucial for surviving project when all things go wrong

CHALLENGES IN TEAM BUILDING

- Project teams solve complex problems, must solve problems together
 - Project is series of problems to solve
 - Much of scientific project is series of decisions
 - Different team members use different approaches to problem solving and coming to decision
 - Project leader must harness power of team members

CHALLENGES IN TEAM BUILDING

- Project teams are temporary, must learn to work together
 - People may not have worked together before
 - Project leader must develop trust, respect, effective ways to communicate between team members and maintain them despite disagreements

EXCELLENT PROJECT TEAMS 1

- Positive team environment
 - Ground rules (work patterns and values of team)
 - Team identity (team committed to shared goal)
 - Listening skills (problem solving demands listening)
 - Meeting management (meetings need goals, plan, steering)

EXCELLENT PROJECT TEAMS 2

- Collaborative problem solving
 - Problem analysis (agree on ways to work through problems)
 - Decision modes (chose different ways to come to decision)
 - Conflict management (achieve best results while maintaining strong relationships)
 - Continuous learning (from success and failure to improve)
- Leadership (looks after health of team)

LEADERSHIP ACTIONS

Excellent project leader will

- Attend to health of team
- Have steady focus on final project result and path to it
- Attend to team members as human beings
- Exhibit and demand accountability

POSITIVE TEAM ENVIRONMENT 1

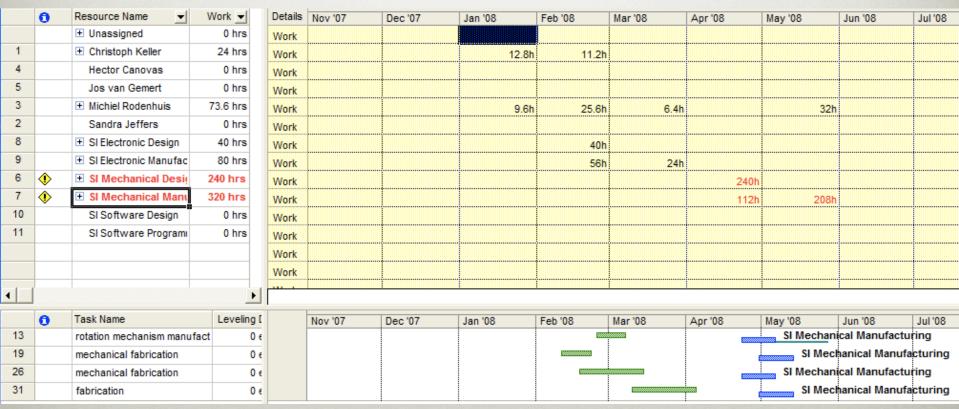
- Ground rules (team behavior and values)
 - Team members understand what is expected from them
 - Team has opportunity to form and own its own culture
 - Meets team's need for structure
- Team identity
 - Communicate and repeat goals and scope of project

POSITIVE TEAM ENVIRONMENT 2

- Provide context of project within organization
 - Demonstrate management support for project (actions, not just words)
- Team relationships based on understanding strength and diversity
 - Knows and uses strengths
 - Understand diversity of styles
 - Trust other team members
 - See each other as human being

RESOURCE NEEDS

- Schedule contains resource assignments
- Produce list of required resources vs. time



SKILL GRANULARITY

- Initial plan will not use everybody at 100%
- Sometimes 10%, sometimes 300%
- Resource leveling/balancing to get to ≤ 100%
 - Reduce concurrent tasks
 - Use several people
 - Extend task duration due to resource constraints
- Skill granularity: cannot hire somebody for 10%
 - Combine with other projects
 - Reduce task duration to increase usage
 - Outsource

JOB ANNOUNCEMENT

- Form depends on organization and publisher
- Content must be attractive to ideal candidate
 - Attractive position
 - Attractive project
 - Attractive environment
 - Attractive future possibilities
- Publication must be read by ideal candidates

CURRICULUM VITAE

- Personal information (Name, address, etc.)
- Research interest
- Education
- Employment
- Awards
- Professional memberships
- Research, teaching, management experience
- List of publications
- List of talks

SHORT LISTING

- Use several people (selection committee)
- Compare candidates against job specifications
- Evaluate
 - Recommendations
 - CV (check for gaps)
 - Check publications and citations to them
 - Web pages (search internet)
- Check how team is strengthened
- Provide equal opportunity

INTERVIEW

- Not all questions are legal
- Make person feel at ease
- Check consistency of CV
- Check whether knowledge is really there
- Check breadth of knowledge
- Check whether applicant is prepared
- Figure out motivation for application
- Inform about hiring procedure

MISTAKES IN INTERVIEWS

- "I hated my last boss."
- "I don't know anything about the company."
- "No, I don't have any questions for you."
- "I'm going to need to take these days off."
- "How long until I get a promotion?"
- "Are you an active member in your church?"
- "As Lady Macbeth so eloquently put it..."
- "And another thing I hate..."

From CNN.com: 8 worst things to say in an interview

HIRING DECISION

- Have everybody prepare a ranked list
- Combine ranks
- Compare with intuition, understand discrepancies
- May
 - Ask for research plan
 - Ask for comparative reviews
 - Do second, in-depth interview
- Check that top candidate is good enough
- Make offer