PROJECT MANAGEMENT FOR SCIENTISTS

COMMUNICATION

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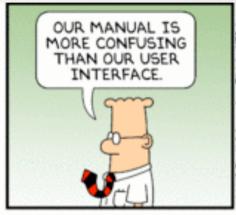
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OUTLINE

- Introduction
- Communicating downward
- Communication plans
- Meetings
- Reporting





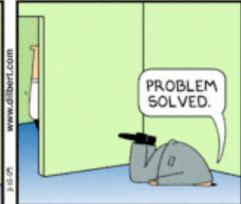






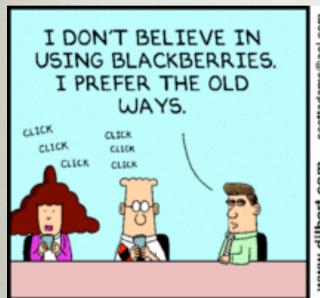






TYPES OF COMMUNICATIONS

- Direction:
 - Above (boss)
 - Below (team)
 - Horizontal (colleagues)
- Leadership Styles:
 - Authoritarian
 - Democratic
 - Anarchistic
- Other types:
 - Task oriented
 - People oriented
- Form:
 - Verbal
 - Written







COMMUNICATING DOWNWARD

Need to adjust style of communication depending on skills, experience, and level of comfort of person

- 1. Instruct
- 2. Convince
- 3. Discuss
- 4. Delegate













INSTRUCTING

- Mostly directing, little support
- Step by step instructions
- Tell, show, let them do it
- Check and correct
- Teach to know and understand

CONVINCING

- Mostly directing and supporting
- Explain goal, reasons for task
- Provide big picture
- Maybe show or supervise during task execution
- Check and correct through meetings

DISCUSSING

- Mostly support, little direction
- Indicate goals clearly
- Leave little room
- Stimulate to solve problems
- Instill self-confidence
- Check by asking questions
- Ask for ideas and recommendations

DELEGATING

- Little support, little direction
- Let them do their task, but provide big picture
- Indicate why you delegate and to whom
- Clear description of task that is being delegated and goals that have to be reached
- Only set goals, not ways how they are achieved
- Offer support when needed
- Agree on time when task is carried out
- Agree on form of control, feedback for closing task

DELEGATING

- Delegate whole task to one person
- Select right person
- Inform about task environment
- Clearly specify expected results
- Delegate responsibility and authority
- Ask for summary
- Get non-intrusive feedback about progress
- Maintain open lines of communication
- If progress is not satisfactory, don't immediately take project back
- Evaluate and reward results, not methods

COMMUNICATION PLAN

- Part of project plan
- Defines how
 - Team will communicate during project
 - Project status information will be communicated to stakeholders
- Poor communications results from:
 - Too busy to keep information flowing
 - Project management fails to plan for exchange of information
- Ensure good communications by including communication requirements and expectations of the team in the project plan

COMMUNICATION PLAN ELEMENTS

- Who needs information?
- Why do they need it?
- What do they need?
- When do they need it?
- What form should the communication take?
- When should the project team meet to discuss status, problems, etc.?

TYPICAL PROJECT COMMUNICATIONS

- Weekly project reports from team members to project manager
- Consolidated information and assessments and problem solutions to sponsor
- Guidelines:
 - Communicate frequently with team members, sponsors
 - Review ideas, drafts, plans with team, sponsor
 - Get approval on pending changes
 - Get approval on final deliverables
 - Establish continuing dialogue with team

COMMUNICATING PROJECT STATUS

- Don't forget to report project achievements and project status
- Regular status reports help meeting expectations
- Helps form informal influence on team
- Sponsor is given information needed for reporting progress and problems
- Follow the communication plan

TO MEET OR NOT TO MEET

- Avoid meetings that serve no purpose
- Meet often enough to maintain team identity and spirit
- Overall balance:
 - Meet 1-on-1 to resolve individual problems
 - Meet as group to discuss issues of joint concern and get input from team members
- Most often: project status meetings

PRODUCTIVE MEETINGS

- Prepare an agenda including start time, duration, location, etc.
- Notify attendees in advance
- Start on time, end at or before end time
- Ensure meeting covers topics on agenda
- Document actions items and decisions
- Distribute meeting minutes to all invitees
- Put action items with individuals responsible for them onto the next meeting's agenda

MEETING AGENDA EXAMPLE

ExPo Weekly Meeting Agenda for 24 September 2008

Open Action Items:

- Marcel to send test web page to Frank Gribbin and receive URL for real web page
- Michiel to have special holder made for Thorlabs pinholes in focus
- Michiel to get red LED source
- Christoph to buy external disk drives for data analysis

WHT Observing Run:

- update: observing plan (Sandra)
- update: travel plans: flights, residencia, rental car (Hector coordinates)
- update: data reduction software during observations (Hector)

Optics:

• update: alignment plan (Michiel)

MEETING MINUTES EXAMPLE

ExPo Weekly Meeting Notes for 24 September 2008

Participants: SVJ, HCC, MR, CUK

Open Action Items:

- Marcel to send test web page to Frank Gribbin and receive URL for real web page done, but Frank did not yet finish the HTML code
- Michiel to have special holder made for Thorlabs pinholes in focus done
- Michiel to get red LED source *IGF will make that*
- Christoph to buy external disk drives for data analysis ordered

New Action Items:

Michiel to talk to Christian about travel plans

WHT Observing Run:

• update: observing plan (Sandra) no changes, will make check list

ACTION ITEMS

- A project to do list that encompasses tasks not listed in the WBS
- Have:
 - Task description
 - Responsible person
 - Due date
 - (completion) status
- May have:
 - ID
 - Priority
 - Originator and date of assignment
 - Related WBS work package

EXAMPLE ACTION ITEMS

| 1 14 CK send Epics logo to Rieks 13-03-09 16- 2 1 CK Acquire optical model from Christophe 2.1.1 17-02-09 31- 2 3 CK Obtain info about 'straight thru focus' 2.2.2 17-02-09 20- 4 5 CK Organize Performance Analysis meeting in June 2.2.5 17-02-09 1- 4 15 CK involve NL Epics Sci. Community in requirements discussion 13-03-09 15- | |
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| |)5-09 |
| | 04-09 |
| 1 4 LV Collect Zimpol requirements with Ronald for discussion 27-3 2.2.1 17-02-09 20- | 03-09 |
| 1 13 LV send Epics schedule in .mpp format to Rieks 13-03-09 16- | 03-09 |
| 2 16 LV Open BSCW accounts for Epics NL-team 13-03-09 20- | 03-09 |
| 3 2 LV Arrange Florence to meet with CK. Aim: polarization with Zemax 2.1.3 17-02-09 1 | 04-09 |
| 1 11 RJ Final adjustments Workplan Epics ph-A2 2.3 13-03-09 | |
| 2 7 RJ Open Epics directory on ASTRON network drive H:, discuss CM system 17-02-09 28- | 02-09 |
| 2 17 RJ Organise PM-4 in Utrecht together with Marion 13-03-09 10- | 04-09 |

REPORTING

- Report project status to sponsors and stakeholders
- Funding agencies often define form and cadence of status reports
- Report in time
- Report achievements and status
- Report problems and possible solutions
- Complaining achieves nothing