

# PROJECT MANAGEMENT FOR SCIENTISTS

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## COMMUNICATION

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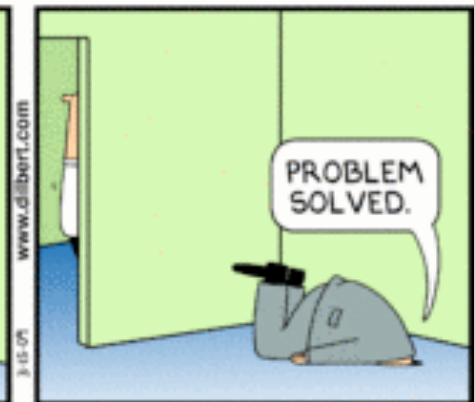
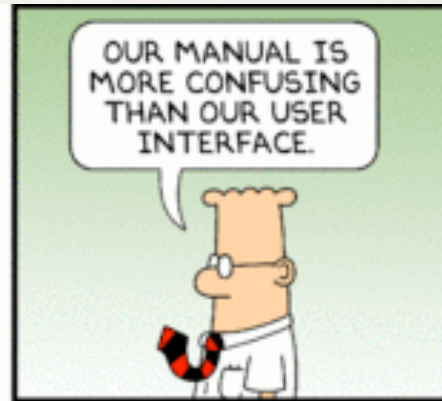
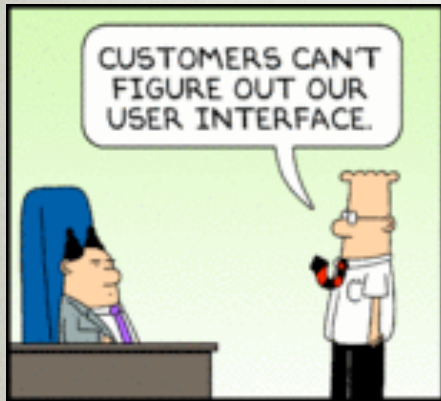
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# OUTLINE

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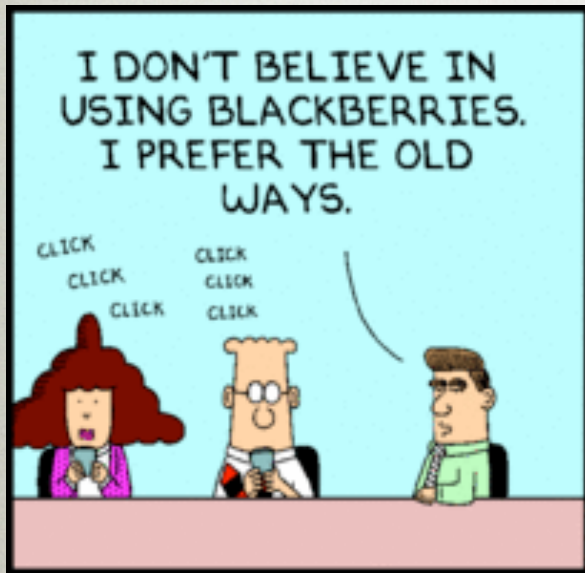
- Introduction
- Communicating downward
- Communication plans
- Meetings
- Reporting



# TYPES OF COMMUNICATIONS

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

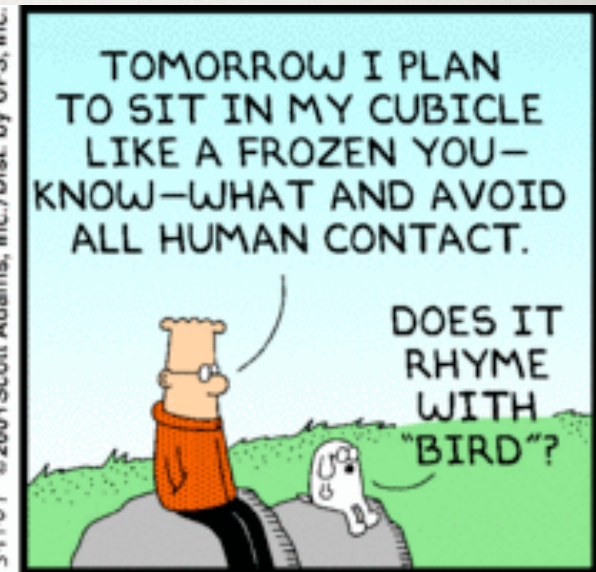


# COMMUNICATING DOWNWARD

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

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





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# INSTRUCTING

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

# CONVINCING

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- 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

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- 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

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- 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

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- 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

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- 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

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- 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

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- 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

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- 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

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- 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

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- 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

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## 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

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## 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

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- 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

Pr	ID	Owner	Description	WP	assigned	due
1	12	CK	Look at EPOL requirements Hans Martin for discussion 27-3	2.2.1	13-03-09	20-03-09
1	14	CK	send Epics logo to Rieks		13-03-09	16-03-09
2	1	CK	Acquire optical model from Christophe	2.1.1	17-02-09	31-03-09
2	3	CK	Obtain info about 'straight thru focus'	2.2.2	17-02-09	20-03-09
4	5	CK	Organize Performance Analysis meeting in June	2.2.5	17-02-09	1-05-09
4	15	CK	involve NL Epics Sci. Community in requirements discussion		13-03-09	15-04-09
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

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- 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