

## **Contents**

<b>1 Project Communications Management</b>	<b>2</b>
1.1 Lecture 1 . . . . .	2
1.2 Lecture 2 . . . . .	9

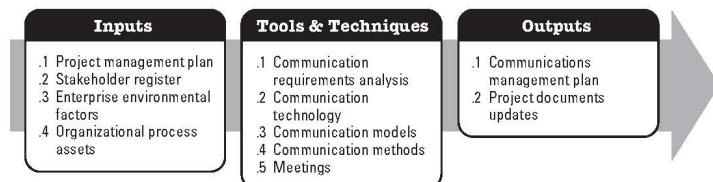


Figure 10-2. Plan Communications Management: Inputs, Tools & Techniques, and Outputs

# 1 Project Communications Management

## 1.1 Lecture 1

### Project Communications Management

Project Management - Year 4 *If you have to choose to believe the paperwork, you have already chosen wrongly.*

### Project Communications Management

- Project Communications Management involves the processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information.
- The processes provide the critical links among people and information that are necessary for successful communications.

### Plan Communications

Part of the Planning Process Group

### Plan Communications

**Communications Technology:** - Technology Factors:

**Inputs**

- Urgency of the need of information
- Availability of Technology: Broadband / HSDPA for site office
- Expected Project Staffing:
  - Site office with 2 persons v. 8 persons
  - PABX, LAN, WAN, etc
  - Do people know how to use the communication systems or will they have to be trained?

- Length of Project
    - 8 persons in office for 2 weeks v. 8 persons for 18 months
    - Will technology change over the course of the project?
  - Project Environment: Face to Face or Virtual Environment?
- 

HSDPA: High-Speed Downlink Packet Access PABX: Private Automatic Branch Exchange PSTN: Public Switched Telephone Network LAN: Local Area Network WAN: Wide Area Network ISDN: Integrated Services Digital Network VPN: Virtual Private Network

<b>Plan Communications</b>	<b>Inputs</b>
<b>Communication Methods</b> <ul style="list-style-type: none"><li>• Interactive Communications<ul style="list-style-type: none"><li>– Web 2.0 Applications, Meetings, Skype, etc.</li></ul></li><li>• Push Communications<ul style="list-style-type: none"><li>– Letters, Memo, Reports, etc.</li><li>– No Guarantee that recipient has received or understood the message.</li><li>– Always ask for ‘read receipt’ or ‘acknowledgment’</li></ul></li><li>• Pull Communications<ul style="list-style-type: none"><li>– Information repositories, such as Moodle, shared drives, etc.</li><li>– User selects the information relevant to them.</li><li>– Requires considerable levels of control.</li><li>– Communication Models</li></ul></li></ul>	

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Web 2.0 is a term used to describe interactive web applications. In the early days of the Internet information was posted on static websites. Users simply read information on-screen. It was generally a one way process, feedback was generally by email. As technologies progressed, users were then given the opportunity to post information directly on web pages etc. This was the beginning of Web 2.0; i.e. interactive web applications such as blogging sites, Facebook, etc. The term Web 2.0 is beginning to disappear as interactive web becomes the norm.

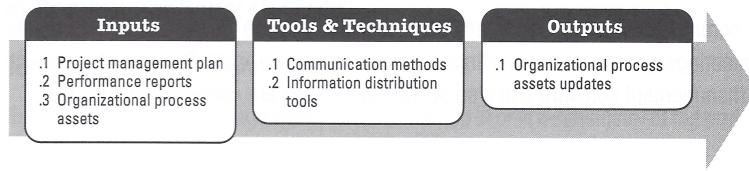
<b>Plan Communications</b>	<b>Tools and Techniques</b>
<b>Communication Requirements Analysis</b> Requirements are defined by combining the type and format of information needed with an analysis of the value of that information, for instance technical information;	
<ul style="list-style-type: none"> <li>• Format: drawing, specification, or both?</li> <li>• Value: Drawing of Air Handler is vital for installation; performance specification is vital for purchase</li> </ul>	

Project Resources should only be used on communications that contribute to project success or where lack of communications lead to project failure

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<b>Plan Communications</b>	<b>Tools and Techniques</b>
<b>Communication Requirements Analysis</b> Information required to determine project communications requirements typically include:	
<ul style="list-style-type: none"> <li>• Organisation Charts</li> <li>• Project Organisation and Stakeholder Responsibility Relationships</li> <li>• Disciplines, Departments, and specialties involved in the project</li> <li>• Logistics of how many people will be involved in the project, and their location</li> <li>• Internal Information needs</li> <li>• External information needs</li> <li>• Stakeholder Information</li> </ul>	

<b>Plan Communications</b>	<b>Outputs</b>
<b>Communications Management Plan</b>	
<ul style="list-style-type: none"> <li>• Stakeholder Communication Requirements</li> <li>• Information to be communicated: Format, Content, level of detail</li> <li>• Person Responsible for communicating information</li> <li>• Person or Groups who will receive the information</li> <li>• Methods or Technologies used: Paper, email, etc.</li> <li>• Frequency of the communications: weekly; monthly</li> <li>• Escalation requirements</li> <li>• Method of updating and refining the communications plan as the project progresses</li> <li>• Glossary</li> </ul>	



**Figure 10-9. Distribute Information: Inputs, Tools & Techniques, and Outputs**

- ‘CPM’ - ‘Critical Path Method’ or ‘Construction Project Manager’?
  - ‘CPI’ - ‘Consumer Price Index’ or ‘Cost Performance Index’?
- 

Surprisingly, a glossary is often necessary to put all project team members on the same footing. NASA are well known for their TLAs (Three Letter Acronyms). The problem is what TLA is being referred to at any one time. The CPI and CPM examples illustrate this problem, even in this lecture series..

<b>Plan Communications</b>	<b>Outputs</b>
<b>Communications Management Plan</b> includes details of:	
<ul style="list-style-type: none"> <li>• Site Meeting (PM team)</li> <li>• Progress Meetings (Client Meeting)</li> <li>• Drawing Specifications (AutoCAD layers, etc.)</li> <li>• Software to be used <ul style="list-style-type: none"> <li>– MS Excel, Word, Powerpoint, AutoCAD 2014, MapInfo, etc.</li> <li>– Backwards Compatibility may be an issue</li> </ul> </li> </ul>	

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### **Distribute Information**

**Part of the Executing Process Group**

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#### **Distribute Information**

- Information Distribution involves making information available to project stakeholders in a timely manner.
  - It includes implementing the communication management plan and responding to unexpected requests for information.
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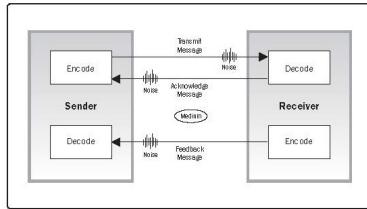


Figure 10-4. Basic Communication Model

## Elements of Communications Theory

### Sender Receiver Models

- Feedback Loops and barriers to communication

### Media Choice

- Verbal, Conversation; Presentation; etc.

### Written

- Memo (email); Report; Drawings; etc
- 

### A model of communications

- Encode - translation of thoughts or ideas onto language the is understood by others.
  - Message - the output of encoding.
  - Medium - method used to convey the message.
  - Noise - anything that interferes with the transmission and understanding of the message.
  - Decode - translation of the message back into meaningful thoughts or ideas.
- 

### Active v. Passive Voice

### Examples

- *The project management plan is intended to facilitate key stakeholder involvement in the project* (passive).
  - *With our project management plan, we intend to obtain key stakeholder involvement.* (active).
  - *Reports are written in the third person impersonal* (passive).
  - *Write reports in third person impersonal* (active).
  - This can run into conflict with 3rd person convention used in scientific and engineering communications.
-

Word	Example
is	is dismissed
are	are completed
was	was vacated
were	were reversed
been	been filed
being	being confirmed
be	be approved
am	am honoured

### Active v. Passive Voice

#### Characteristics of Passive Voice

- You can't assign responsibility.
- '*Reports are written*' - this is an instruction from whom?
- Readers have to perform extra work to understand the sentence.
- Sentences tend to be longer.

Can usually be identified by:

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#### Distribute Information

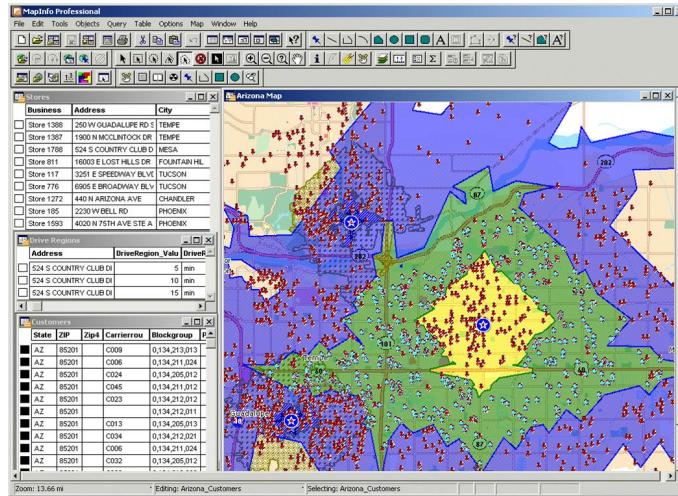
Inputs  
Project Management Plan Performance Reports Organisational Process  
Assets

- Refer to Book
- 

#### Distribute Information

Tools and Techniques  
Communication Methods Information Distribution Tools Note the importance of:

- General communications skills
  - Ensuring the right person gets the right information
  - Ensuring that the receiver correctly interprets the information, i.e. FEEDBACK
  - Lessons Learned Processes
    - To capture communications (and project) methods that were successful or failed; and the reasons why.
    - Not easy to achieve in the construction sector. Most PM team members in construction are involved in a number of projects, they may not always have the time to engage in a 'project post-mortem'.
-



## Distribute Information Communication Methods

- Meetings, Document Distribution, Shared Access Databases, etc.
- Email, Fax, Voice, Video Conferencing, Web Conferencing, Skype, Google Hangouts

## Tools and Techniques

### MS Project Enterprise Edition et. al. Information Distribution Tools

- Tools to control the methods above.
- Note the importance of tracking who has received and needs to receive information.
- Speed and ease of use are vital to successful distribution systems.

## MapInfo Professional

GIS systems are capable of showing highly complex spatial data. However sometimes it is necessary to explain the function of diagrammatic objects and symbols. Issues are also likely to emerge in relation to data transfer. GIS systems tend to have proprietary file formats, making document interchange difficult.

## Distribute Information Organisational Process Assets Updates

## Outputs

- Stakeholder Notifications
- Project Reports

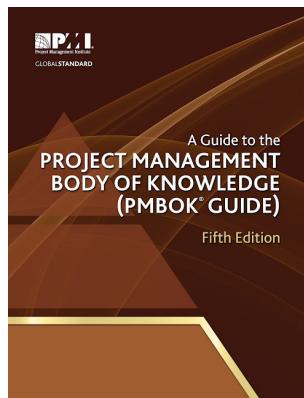
- Project Presentations
- Project Records
- Feedback from Stakeholders
- Lessons Learned Documentation

#### **Requested Changes (PMBOK 3rd Edition)**

- Changes to the Information Distribution Process, which should be run through the Integrated Change Control Process
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#### **Next Lecture**

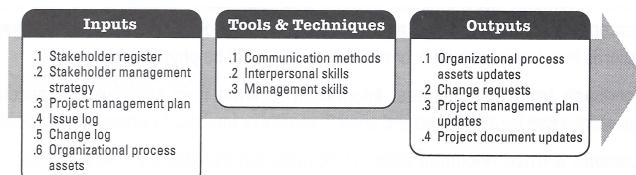
'A Guide to the Project Management Body of Knowledge' Chapter 10



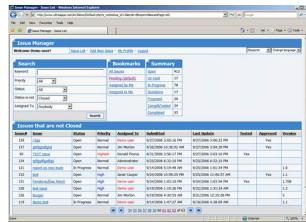
#### **Reading:**

## **1.2 Lecture 2**

### **Manage Stakeholder Expectations** Part of the Monitoring & Controlling Process Group



**Figure 10-11. Manage Stakeholder Expectations: Inputs, Tools & Techniques, and Outputs**



## Manage Stakeholders

- Managing Stakeholders refers to Managing Communications to satisfy the needs of, and resolve issues with, project stakeholders.
  - Actively Managing Stakeholders increases the likelihood that the project will not veer off track due to unresolved issues.
  - It also enhances the ability of persons to operate synergistically.
    - The construction sector is notoriously adversarial. Why?
- 

## Manage Stakeholder Expectations

**Inputs**

### Project Management Plan Communications Management Plan

- Stakeholders communications needs and expectations are documented in the Communications Management Plan

## Organisational Process Assets Issue Management Procedures Change Control Procedures Stakeholder Register Stakeholder Management Strategy Change Log

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## Manage Stakeholder Expectations Issue Log

**Inputs**

- Tool that can be used to document and monitor the resolution of issues
  - An issue is clarified and stated in a way that it can be resolved. An owner is assigned and a target date usually established for closure
  - Unresolved Issues can become a major source of conflict
- 

## Manage Stakeholder Expectations Communications Methods:

**Tools and Techniques**

- Face to Face; Verbal
  - Written; Reports etc.
  - Mass Media; Billboards, Local and National Press, Radio, Web, etc.
-



## Manage Stakeholder Expectations

### Interpersonal Skills

- Building Trust
- Resolving Conflict
- Overcoming Resistance to change
- Active Listening

### Management Skills

- Presentation Skills
- Negotiating
- Writing
- Public Speaking

## Tools and Techniques

Active listening is about confirming what the speaker has said by restating or paraphrasing a response. In effect, it is about closing the communications loop. This can work well in small groups, but can become tiresome if overused. In a lecture/presentation environment it is generally not encouraged; opportunities for feedback are generally left to the end.

## Manage Stakeholder Expectations

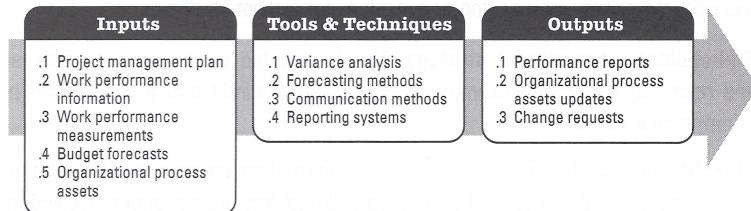
### Organisational Process Assets Updates

- Lessons Learned Documentation etc.
- Causes of Issues / Reasons for corrective actions taken

## Outputs

### Change Requests Project Management Plan Updates Project Document Updates

- Stakeholder Management Strategy
- Stakeholder Register
- Issue Log



**Figure 10-13. Report Performance: Inputs, Tools & Techniques, and Outputs**

### **Report Performance** Part of the Monitoring & Controlling Process Group

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#### **Report Performance**

The Performance Reporting Process involves the collection of all baseline data, and distribution of performance information to stakeholders. Performance Information includes data in relation to:

- Scope
  - Schedule
  - Cost
  - Quality
  - Risk
  - Procurement
  - Etc.
- 

#### **Report Performance** Project Management Plan

**Inputs**

- Performance Measurement Baseline

#### **Work Performance Information**

- Completion Status of Deliverables

#### **Work Performance Measurement**

- SV; SPI; CPI; etc.

#### **Budget Forecasts**

- EAC; ETC; Trend Analysis

#### **PMBOK 3rd Edition also included:**

- Quality Control Measures: Actual Quality Measurements

- WWTP Commissioning; BOD<sub>5</sub>, Suspended Solids, Nitrogen, Phosphorous
  - Large Buildings: AHU performance; volumetric flow rates
  - Approved Change Requests: Approved Changes to Project Scope
  - Deliverables: Approval Status of Deliverables
- 

<b>Report Performance</b>	<b>Tools &amp; Techniques</b>
<b>Variance Analysis Forecasting Methods</b>	

- Time Series Methods: Historical Data used to predict future outcomes
- Causal/Econometric Methods: Cause and Effect used to predict future outcomes. It relies on determining the variables which will have the greatest effect on the outcome.

<b>Judgmental Methods</b>	
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- Intuitive Judgment, opinions and probabilities

<b>Others</b>	
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- Simulation, etc.
- 

<b>Report Performance</b>	<b>Tools &amp; Techniques</b>
<b>Communications Methods</b>	

- Status Review Meetings

<b>Reporting Systems</b>	
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- Systems have to be designed and implemented to support the performance reporting.
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<b>Report Performance</b>	<b>Outputs</b>
<b>Performance Reports</b>	

- Summary and Presentation of the information gathered, and results of any analysis against baseline information, may include S-curves, EVM, etc.
- Current Status of Risks and Issues
- Work to be completed during the next reporting period
- Summary of changes approved in the reporting period

WBS Element	Values			Variance		Performance Index	
	Planned Value (PV)	Earned Value (EV)	Actual Cost (AC)	Schedule EV - PV	Cost EV - AC	Schedule EV ÷ PV	Cost EV ÷ AC
1.0 Pre-Pilot Plan	63,000	58,000	62,500	(5,000)	(4,500)	0.92	0.93
2.0 Checklists	64,000	48,000	46,800	(16,000)	1,200	0.75	1.03
3.0 Curriculum	23,000	20,000	23,500	(3,000)	(3,500)	0.87	0.85
4.0 Mid-Term Evaluation	68,000	68,000	72,500	—	(4,500)	1.00	0.94
5.0 Implementation Support	12,000	10,000	10,000	(2,000)	—	0.83	1.00
6.0 Practice Manual	7,000	6,200	6,000	(800)	-200	0.89	1.03
7.0 Roll-Out Plan	20,000	13,500	18,100	(6,500)	(4,600)	0.68	0.75
<b>Totals</b>	<b>257,000</b>	<b>223,700</b>	<b>239,400</b>	<b>(33,300)</b>	<b>(15,700)</b>	<b>0.87</b>	<b>0.93</b>

Figure 10-15. Tabular Performance Report Sample

- Recommended Corrective Actions: actions required to bring the project back on schedule etc.
- Forecasts: Completion Forecasts based on performance information (EAC and ETC)

### Change Requests

- Performance analysis often generates change requests...
- These should be run through the Integrated Change Control Process

### Organisational Process Assets Updates

- Lessons Learned Documentation, etc.

### Report Performance

#### Next Lecture

'A Guide to the Project Management Body of Knowledge' Chapter 4

#### Reading:

