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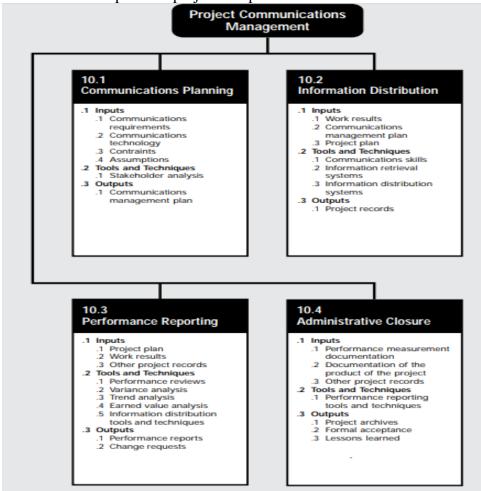
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Project communication management

Project communication management is a collection of processes that helps to make sure the right messages are sent, received, and understood by the right people. It includes the processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information

Project Communications Management Processes

- Communications Planning—determining the information and communications needs of the stakeholders: who needs what information, when will they need it, and how will it be given to them.
- Information Distribution—making needed information available to project stakeholders in a timely manner.
- Performance Reporting—collecting and disseminating performance information. This includes status reporting, progress measurement, and forecasting.
- Administrative Closure—generating, gathering, and disseminating information to formalize phase or project completion.



Communication Planning

- Communications planning involves determining the information and communications needs of the stakeholders: who needs what information, when will they need it, and how will it be given to them
- informational needs and the methods of distribution vary widely among projects
- Identifying the informational needs of the stakeholders and determining a suitable means of meeting those needs is an important factor for project success
- The majority of communications planning is done as part of the earliest project phases.
- However, the results of this process should be reviewed regularly throughout the project and revised as needed to ensure continued applicability.

Inputs Tools and Techniques Communications Requirements Communications Technology Constraints Assumptions Tools and Techniques Stake holder Analysis Communications Management Plan Plan

Inputs to Communications Planning

Communications requirements:

Communications requirements are the sum of the information requirements of the project stakeholders. Requirements are defined by combining the type and format of information required with an analysis of the value of that information. Project resources should be expended only on communicating information which contributes to success or where lack of communication can lead to failure. Information typically required to determine project communications requirements includes:

- Project organization and stakeholder responsibility relationships.
- Disciplines, departments, and specialties involved in the project.
- Logistics of how many individuals will be involved with the project and at which locations.
- External information needs (e.g., communicating with the media).

Communications technology

The technologies or methods used to transfer information back and forth among project elements can vary significantly: from brief conversations to extended meetings, from simple written documents to immediately accessible on-line schedules and databases. Communications technology factors which may affect the project include:

• The immediacy of the need for information—is project success dependent upon having frequently updated information available on a moment's notice, or would regularly issued written reports suffice?

- The availability of technology—are the systems that are already in place appropriate, or do project needs warrant change?
- The expected project staffing—are the communications systems proposed compatible with the experience and expertise of the project participants, or will extensive training and learning be required?
- The length of the project—is the available technology likely to change before the project is over in a manner that would warrant adopting the newer technology?

Constraints

Constraints are factors that will limit the project management team's options.

• For example, if substantial project resources will be procured, more consideration will need to be given to handling contract information. When a project is performed under contract, there are often specific contractual provisions that affect communications planning.

Assumptions

Assumptions are factors that, for planning purposes, will be considered to be true, real, or certain. Assumptions generally involve a degree of risk. They may be identified here or they may be an output of risk identification

Tool to communication planning

Stakeholder Communication Analysis

The information needs of the various stakeholders should be analyzed to develop a methodical and logical view of their information needs and sources to meet those needs. The analysis should consider methods and technologies suited to the project that will provide the information needed. Care should be taken to avoid wasting resources on unnecessary information or inappropriate technology.

Sample stakeholder analysis for communication planning

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Stakeholders	Document Name	Document Format	Contact Person	Due
Customer management	Monthly status report	Hard copy and meeting	Tina Erndt, Tom Silva	First of month
Customer business staff	Monthly status report	Hard copy	Julie Grant, Sergey Cristobal	First of month
Customer technical staff	Monthly status report	E-mail	Li Chau, Nancy Michaels	First of month
Internal management	Monthly status report	Hard copy and meeting	Bob Thomson	First of month
Internal business and technical staff	Monthly status report	Intranet	Angie Liu	First of month
Training subcontractor	Training plan	Hard copy	Jonathan Kraus	November 1
Software subcontractor	Software implementa- tion plan	E-mail	Najwa Gates	June 1

Output of Communication Planning

Communications Management Plan

The communications management plan may be formal or informal, highly detailed or broadly framed, based on the needs of the project. It is a subsidiary element of the overall project plan. The communications management plan may be formal or informal, highly detailed or broadly framed, based on the needs of the project

A communications management plan is a document which provides:

- A description of a collection and filing structure for gathering and storing various types of information
- A distribution structure describing what information goes to whom, when, and how
- A description of the information to be distributed, including format, content, level of detail, and conventions/definitions to be used.
- A project schedule for producing the information
- Access methods for obtaining the information
- A method for updating the communications management plans as the project progresses and develops
- A glossary of common terminology

Information Distribution

Information distribution involves making needed information available to project stakeholders in a timely manner. It includes implementing the communications management plan as well as responding to unexpected requests for information. Getting the right information to the right people at the right time and in a useful format is just as important as developing the information in the first place. Important considerations include:

- -using technology to enhance information distribution
- -formal and informal methods for distributing information

The distributing information process is used throughout the whole project life-cycle to allow implementing the project communications plan and responding to requests for information. The process can be effectively managed due to implementation of the project information distribution techniques and models listed in the project communications plan.

Tools and Techniques • Work Results • Communications Skills • Information retrieval systems • Information distribution methods

Outputs • Project Records • Project Reports • Project Presentations

Inputs to information distribution

Input for Information distribution

- Work performance reports results of activities performed to accomplish the project. Information on work results completed and incomplete scheduled assignments and deliverables, actual and committed budget cost, and so on.
- Communications management plan (CMP) describe how all communication on the project is handled.
- Project plan formal, approved document used to guide project execution and control

Tools and techniques to information distribution

Establish good communication skills

Key to good communication skills

- Project managers say they spend as much as 90 percent of their time communicating
- Need to focus on group and individual communication needs
- Use formal and informal methods for communicating
- Distribute important information in an effective and timely manner
- Set the stage for communicating bad news
- Determine the number of communication channels

Understanding Individual and Group Communication needs

- People are not interchangeable parts
- As illustrated in Brooks' book The Mythical Man- Month, you cannot assume that a task originally scheduled to take two months of one person's time can be done in one month by two people
- Nine women cannot produce a baby in one month!

Distributing Information in an Effective and Timely Manner

- Effective distribution of relevant information relies on the selection of information distribution methods to ensure the right people (the project stakeholders and the project team) receive and send information about the project helping evaluate and make decisions
- Don't bury crucial information.
- Don't be afraid to report bad information.
- Oral communication via meetings and informal talks helps bring important information—good and bad—out into the open.
- During the process of distributing information, the project manager ensures that communications channels are 'clear' and nothing blocks information flows

Formal and Informal Methods for Communicating

- It is not enough for project team members to submit reports to their project managers and other stakeholders and then assume that everyone who needs to know the information will read the reports.
- Many people prefer informal communications
- Many nontechnical professionals prefer to have a two-way conversation about a project rather than reading detailed reports, e-mails, or Web pages to try to find pertinent(related) information.

• Sometimes to build trusting relationship with the project team members informal methods are used

There are three basic forms of communication that define information distribution formats:

- Face-to-face communications (group or individual meetings)
- Hard-copy communications (letters, paper reports)
- Electronic communications (emails, videoconferences, voice chats)

Importance of Face-to-Face Communication

- Research says that in a face-to-face interaction:
- 58 percent of communication is through body language.
- 35 percent of communication is through how the words are said.
- 7 percent of communication is through the content or words that are spoken.
- Pay attention to more than just the actual words someone is saying.
- A person's tone of voice and body language say a lot about how he or she really feels.

Personal preference affect communication needs

- Introverts like more private communications, while extroverts like to discuss things in public
- Intuitive people like to understand the big picture, while sensing people need step-by-step details
- Thinkers want to know the logic behind decisions, while feeling people want to know how something affects them personally
- Judging people are driven to meet deadlines while perceiving people need more help in developing and following plans

Encouraging More Face-to-Face Interactions

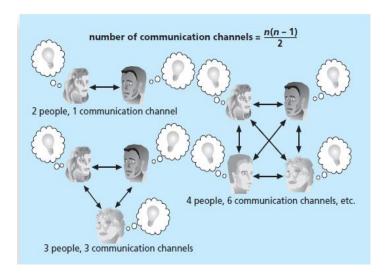
- Short, frequent meetings are often very effective in IT projects.
- Stand-up meetings force people to focus on what they really need to communicate.
- Some companies have policies preventing the use of e- mail between certain hours or even entire days of the week.

Setting the Stage for Communicating Bad News

- Bad news might seem like a major setback, but you can recommend steps to take to mitigate the problem
- Project sponsors and other senior managers want to know that you have evaluated the impact of the situation, considered alternatives, and made a recommendation based on your expertise.
- Project managers should know how a major problem might affect the bottom line of the organization and be able to use their leadership skills to handle the challenge.

Determining the number of communication channel

- As the number of people involved increases, the complexity of communications increases because there are more communications channels or pathways through which people can communicate
- Number of communications channels = [n(n-1)]/ 2 where n is the number of people involved



Information Retrieval System

- simple paper files, bound notebook, or they can be stored electronically as files or in a database
- Commercial products such as Lotus Notes and Microsoft SharePoint are examples of applications software.

Information distribution methods

- Project information may be distributed using a variety of methods including project meetings, hard copy document distribution, shared access to networked electronic databases, fax, electronic mail, voice mail, and video conferencing.
- There are three broad classifications for communication methods:
- o Interactive communication: As the name implies, two or more people interact to exchange information via meetings, phone calls, or video conferencing. This method is usually the most effective way to ensure common understanding.
- Push communication: Information is sent or pushed to recipients without their request via reports, e-mails, faxes, voice mails, and other means. This method ensures that the information is distributed, but does not ensure that it was received or understood.
- o Pull communication: Information is sent to recipients at their request via Web sites, bulletin boards, e-learning, knowledge repositories like blogs, and other means.

Outputs from Information Distribution

Project records

- organized for easy access
- includes correspondence, documents, and memos
- Team will keep their own personal records for their assigned areas
- Their personal records are often more detailed than the official project records.

Project reports

• formal reports on status and issues

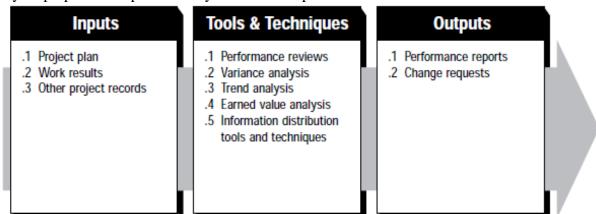
Project presentations

- describe how the reports and records are presented to stakeholders
- formal or informal. A great deal of a project manager's job

Performance reporting

It involves collecting and disseminating performance information in order to provide stakeholders with information about how resources are being used to achieve project objectives. The process includes:

- Status reporting—describing where the project now stands.
- Progress reporting—describing what the project team has accomplished during a certain point of time.
- Forecasting—predicting future project status and progress.
- Performance reporting should generally provide information on scope, schedule, cost, and quality. Many projects also require information on risk and procurement. Reports may be prepared comprehensively or on an exception basis.



Inputs to Performance Reporting

- **Project plan:** The project plan contains the various baselines that will be used to assess project performance. Includes subsidiary plans such as the communications plan, risk management plan, and quality plan
- Work results: Work results—which deliverables have been fully or partially completed, what costs have been incurred or committed, etc.—are an output of project plan execution. Work results should be reported within the framework provided by the communications management plan. Accurate, uniform information on work results is essential to useful performance reporting.
- Other project records: Other project documents often contain information pertaining to the project context that should be considered when assessing project performance. Eg: blueprints, technical documents, or spécifications documents.

Tools and Techniques for Performance Reporting

• **Performance reviews**: Performance reviews are meetings held to assess project status or progress. Performance reviews are typically used in conjunction with one or more of the performance reporting techniques described below.

- Variance analysis: Variance analysis involves comparing actual project results to
 planned or expected results. Cost and schedule variances are the most frequently
 analyzed, but variances from plan in the areas of scope, quality, and risk are often of
 equal or greater importance.
- **Trend analysis**: Trend analysis involves examining project results over time to determine if performance is improving or deteriorating.
- Earned value analysis: It integrates scope, cost, and schedule measures to help the project management team assess project performance. It compares actual results to planned result. Calculations are based on three key measures: Planned value, Actual cost, Earned value.
- Info distribution tools & techniques includes all the tools and technique mentioned in Information distribution process.

Outputs from Performance Reporting

- **Performance reports:** Performance reports organize and summarize the information gathered and present the results of any analysis. Reports should provide the kinds of information and the level of detail required by various stakeholders as documented in the communications management plan. Common formats for performance reports include bar charts (also called Gantt charts), S-curves, histograms, and tables.
- **Change requests:** Analysis of project performance often generates a request for a change to some aspect of the project. These change requests are handled as described in the various change control processes (e.g., scope change management, schedule control, etc.).

Tabular performance report

		P	0 = === = === 0	report			
WBS Element	Budget (\$)	Earned Value (\$)	Actual Cost (\$)	Cost Vai (\$)	riance (%)	Schedule (\$)	Variance (%)
1.0 Pre-pilot planning	63,000	58,000	62,500	-4,500	-7.8	-5,000	-8.6
2.0 Draft checklists	64,000	48,000	46,800	1,200	2.5	-16,000	-33.3
3.0 Curriculum design	23,000	20,000	23,500	-3,500	-17.5	-3,000	-15.0
4.0 Mid-term evaluation	68,000	68,000	72,500	-4,500	-6.6	0	0.0
5.0 Implementation suppo	rt 12,000	10,000	10,000	0	0.0	-2,000	-20.0
6.0 Manual of Practice	7,000	6,200	6,000	200	3.2	-800	-12.9
7.0 Roll-out plan	20,000	13,500	18,100	-4,600	-34.1	-6,500	-48.1
Totals	257,000	223,700	239,400	-15,700	-7.0	-33,300	-14.9

Administrative closure

A project or phase of a project requires closure – closing the administrative functions takes place at the end of the project. Administrative closure consists of verifying and documenting project results to formalize acceptance of the product of the project by the sponsor, client, or customer. Because projects are temporary, project closure briefings and lessons-learned documents provide important feedback. It includes collection of project records, ensuring that they reflect final specifications, analysis of project success and effectiveness, and archiving such information for future use. Administrative closure activities should not be delayed until project completion. Each phase of the project should be properly closed to ensure that important and useful information is not lost.

Inputs 1. Performance measurement documentation 2. Documentation of the product of the project 3. Other project records 1. Performance reporting tools and techniques 3. Performance reporting tools and techniques 4. Project archives 5. Performance reporting tools and techniques 5. Project archives 6. Performance reporting tools and techniques 7. Performance reporting tools are tools and techniques 7. Performance reporting tools are tools and techniques 7. Performance reporting tools are tools a

Inputs to Administrative Closure

- **Performance measurement documentation**: All documentation produced to record and analyze project performance, including the planning documents which established the framework for performance measurement, must be available for review during administrative closure. Other documents such as status, progress, and forecast report
- **Documentation of the product of the project**: Documents produced to describe the product of the project (plans, specifications, technical documentation, drawings, electronic files, etc.—the terminology varies by application area) must also be available for review during administrative closure.
- Other project records related documents

Tools and techniques

Performance reporting tools and techniques

- provide a feedback loop, solving the information needs of the various stakeholders and showing the interaction of all the tools used during the Performance Reporting phase described.
- Tools and techniques include performance reviews, variance analysis, trend analysis, and earned value analysis.

Project reports: formal reports on status and issues

Project presentations

- describe how the reports and records are presented to stakeholders.
- It can be formal or informal.
- A great deal of a project manager's job involves doing this stakeholder presentation

Outputs from Administrative Closure

Project archives

- A complete set of indexed project records should be prepared for archiving by the appropriate parties. This is the long-term storage of all project activity records
- Any project-specific or program-wide historical databases pertinent to the project should be updated.
- When projects are done under contract or when they involve significant procurement, particular attention must be paid to archiving of financial records.

Formal acceptance

• Documentation that the client or sponsor has accepted the product of the project (or phase) should be prepared and distributed.

Lessons learned

- includes detailed information on how common and usual project events were resolved.
- part of the organization's knowledge base so the information can be applied to future projects.

SUGGESTIONS FOR IMPROVING PROJECT COMMUNICATIONS

- Manage conflicts effectively
- Develop better communication skills
- Run effective meetings
- Developing a Communications Infrastructure

Conflict Management

In a project, when the stakeholder's goals, needs, interests and values interfere with one other, conflicts may arise. As a result of healthy competitions, conflicts may cultivate innovation and inventiveness among the employees within an organization. Issues that may cause conflicts must be controlled to prevent the advancement of a fight between project team and stakeholders. At this stage conflict management plays a key role for a successful completion. Poor conflict management decreases productivity, quality and team morale within a project. One of the most important job of a project manager is to resolve disputes in the early stage when the disputes are minor. Conflict management is the process identifying and handling conflicts efficiently. The PMBOK Guide recommends below five techniques.

Withdrawing

The manager avoids and lets the conflict resolves itself. It is also known as avoiding. It is used when the issue is unimportant or there is no chance of winning.

Smoothing

The project manager accommodates the concerns of other people rather than his own concerns. It is also known as accommodating.

Advantage: to save time by avoiding discussions that seems to take long time.

Compromising

The project manager takes suggestions from both parties and makes a compromise. It is used when there is a need of a temporary solution or when both parties have equally significant goals. It is quick dispute resolution technique which creates a win-win solution.

Forcing

The project manager acts in a very assertive manner to achieve his goals or agrees with one party's viewpoint and enforce the others. It is also known as competing. It may negatively affect team's morale.

Collaborating

The project manager negotiates the issue with all parties to find a solution considering multiple aspects. It is time consuming technique which is not suitable when there is an emergency.

Develop better communications skills

- Most companies spend a lot of money on technical training for their employees, even when employees might benefit more from communications training
- Communication skills training usually includes role-playing activities in which participants learn concepts such as building rapport
- A minimal investment in communication and presentation training can have a tremendous payback to individuals, their projects, and their organizations.
- Top management must set high expectations and lead by example.
- As with any other goal, communication can be improved with proper planning, support, and leadership from top management.

Run Effective Meetings

- A well-run meeting can be a vehicle for fostering team building and reinforcing expectations, roles, relationships, and commitment to the project.
- A poorly run meeting can have a detrimental effect on a project.
- Many people complain about the time they waste in unnecessary or poorly planned and poorly executed meetings

Guidelines that can help improve time spent at meetings:

- Determine if a meeting can be avoided. Do not have a meeting if there is a better way of achieving the objective at hand.
- Define the purpose and intended outcome of the meeting. Be specific about what should happen as a result of the meeting. All meetings should have a purpose and intended outcome
- Determine who should attend the meeting.
- Provide an agenda to participants before the meeting. Meetings are most effective when the participants come prepared.
- Prepare handouts and visual aids, and make logistical arrangements ahead of time. Project managers and their team members must take time to prepare for meetings, especially important ones with key stakeholders.
- Run the meeting professionally.

- Set the ground rules for the meeting. State up front how the meeting will be run.
- Build relationships. Depending on the culture of the organization and project, it may help to build relationships by making meetings fun experiences.

Developing a Communications Infrastructure

- A communications infrastructure is a set of tools, techniques, and principles that provide a foundation for the effective transfer of information
- Tools include e-mail, project management software, groupware, fax machines, telephones, teleconferencing systems, document management systems, and word processors
- Techniques include reporting guidelines and templates, meeting ground rules and procedures, decision-making processes, problem-solving approaches, and conflict resolution and negotiation techniques
- Principles include using open dialog and an agreed upon work ethic