

9. PROJECT HUMAN RESOURCE MANAGEMENT

Learning Objectives

- Explain the importance of good human resource management on projects, including the current state and future implications of human resource management, especially on information technology projects.
- Define project human resource management and understand its processes.
- Summarize key concepts for managing people by understanding the theories of Abraham Maslow, Frederick Herzberg, David McClelland, and Douglas McGregor on motivation, H. J. Thamhain and D. L. Wilemon on influencing workers, and Stephen Covey on how people and teams can become more effective.

Learning Objectives

- Discuss human resource planning and be able to create a project organizational chart, responsibility assignment matrix, and resource histogram.
- Understand important issues involved in project staff acquisition and explain the concepts of resource assignments, resource loading, and resource leveling.
- Assist in team development with training, team-building activities, and reward systems.
- Explain and apply several tools and techniques to help manage a project team and summarize general advice on managing teams.
- Describe how project management software can assist in project human resource management.

The Importance of Human Resource Management

- People determine the success and failure of organizations and projects.
- Recent statistics about IT workforce:
 - The labor market changed a lot early in the new millennium, with shortages and then an abundance of IT workers.
 - A 2004 ITAA report showed a slight recovery in 2004.
 - The total number of IT workers in the U.S. was more than 10.5 million in early 2004, up from 10.3 million in 2003 and 9.9 million in 2002.
 - Eighty-nine percent of new jobs came from non-IT companies, such as banking, finance, manufacturing, food service, and transportation.
 - Hiring managers say interpersonal skills are the most important soft skill for IT workers.*

*Information Technology Association of America (ITAA), “Recovery Slight for IT Job Market in 2004,” (September 8, 2004) www.ita.org.

Digital Planet Reports

- The global high-tech industry generated more than \$2.1 trillion in 1999, \$2.3 trillion in 2000, and \$2.4 trillion in 2001.
- The Internet and e-commerce were notable bright spots in the global economy.
- Global e-commerce increased 79 percent between 2000 and 2001.*
- China, Poland, and other developing countries are playing an increasing role in the global IT market.

*Information Technology Association of America (ITAA), "Global IT Spending to Rocket from Current \$2 Trillion to \$3 Trillion, New Study Finds," *Update for IT Executives* (2001) p. 6 (15) www.ita.org.

Long Hours and Stereotypes of IT Workers Hurt Recruiting

- Many people are struggling with how to increase and diversify the IT labor pool.
- Noted problems include:
 - The fact that many IT professionals work long hours and must constantly stay abreast of changes in the field.
 - Undesirable stereotypes that keep certain people (for example, women) away from the career field.
 - The need to improve benefits, redefine work hours and incentives, and provide better human resource management.

Media Snapshot

- “Here’s the dirty little secret: U.S. productivity is No. 1 in the world when productivity is measured as gross domestic product per worker, but our lead vanishes when productivity is measured as GDP per hour worked...Europeans take an average of six to seven weeks of paid annual leave, compared with just 12 days in the United States. Twice as many American as European workers put in more than 48 hours per week.”*
- Sociologists have shown that many Americans, especially men, would like to have more family or leisure time. Recent surveys show that many Americans are willing to sacrifice up to a quarter of their salaries in return for more time off!

*Williams, Joan and Ariane Hegewisch, “Confusing productivity with long work week,” *Minneapolis Star Tribune* (September 6, 2004) (www.startribune.com).

What is Project Human Resource Management?

- Making the most effective use of the people involved with a project.
- Processes include:
 - **Human resource planning:** Identifying and documenting project roles, responsibilities, and reporting relationships.
 - **Acquiring the project team:** Getting the needed personnel assigned to and working on the project.
 - **Developing the project team:** Building individual and group skills to enhance project performance.
 - **Managing the project team:** Tracking team member performance, motivating team members, providing timely feedback, resolving issues and conflicts, and coordinating changes to help enhance project performance.

Keys to Managing People

- Psychologists and management theorists have devoted much research and thought to the field of managing people at work.
- Important areas related to project management include:
 - Motivation theories
 - Influence and power
 - Effectiveness

Intrinsic and Extrinsic Motivation

- **Intrinsic motivation** causes people to participate in an activity for their own enjoyment.
- **Extrinsic motivation** causes people to do something for a reward or to avoid a penalty.
- For example, some children take piano lessons for intrinsic motivation (they enjoy it) while others take them for extrinsic motivation (to get a reward or avoid punishment).

Maslow's Hierarchy of Needs

- Abraham Maslow argued that human beings possess unique qualities that enable them to make independent choices, thus giving them control of their destiny.
- Maslow developed a **hierarchy of needs**, which states that people's behaviors are guided or motivated by a sequence of needs.

Figure 9-1. Maslow's Hierarchy of Needs



Herzberg's Motivational and Hygiene Factors

- Frederick Herzberg wrote several famous books and articles about worker motivation. He distinguished between:
 - **Motivational factors:** Achievement, recognition, the work itself, responsibility, advancement, and growth. These factors produce job satisfaction.
 - **Hygiene factors:** Larger salaries, more supervision, and a more attractive work environment. These factors cause dissatisfaction if not present, but do not motivate workers to do more.

McClelland's Acquired-Needs Theory

- Specific needs are acquired or learned over time and are shaped by life experiences. The following are the main categories of acquired needs:
 - **Achievement (nAch)**: People with a high need for achievement like challenging projects with attainable goals and lots of feedback.
 - **Affiliation (nAff)**: People with high need for affiliation desire harmonious relationships and need to feel accepted by others, so managers should try to create a cooperative work environment for them.
 - **Power (nPow)**: People with a need for power desire either personal power (not good) or institutional power (good for the organization). Provide institutional power seekers with management opportunities.

McGregor's Theory X and Y

- Douglas McGregor popularized the human relations approach to management in the 1960s.
- **Theory X:** Assumes workers dislike and avoid work, so managers must use coercion, threats, and various control schemes to get workers to meet objectives.
- **Theory Y:** Assumes individuals consider work as natural as play or rest and enjoy the satisfaction of esteem and self-actualization needs.
- **Theory Z:** Introduced in 1981 by William Ouchi and is based on the Japanese approach to motivating workers, which emphasizes trust, quality, collective decision making, and cultural values.

Thamhain and Wilemon's Ways to Have Influence on Projects

1. **Authority:** The legitimate hierarchical right to issue orders.
2. **Assignment:** The project manager's perceived ability to influence a worker's later work assignments.
3. **Budget:** The project manager's perceived ability to authorize others' use of discretionary funds.
4. **Promotion:** The ability to improve a worker's position.
5. **Money:** The ability to increase a worker's pay and benefits.

Thamhain and Wilemon's Ways to Have Influence on Projects (cont'd)

6. **Penalty:** The project manager's ability to cause punishment.
7. **Work challenge:** The ability to assign work that capitalizes on a worker's enjoyment of doing a particular task.
8. **Expertise:** The project manager's perceived special knowledge that others deem important.
9. **Friendship:** The ability to establish friendly personal relationships between the project manager and others.

Ways to Influence that Help and Hurt Projects

- Projects are more likely to *succeed* when project managers influence people using:
 - Expertise
 - Work challenge
- Projects are more likely to *fail* when project managers rely too heavily on:
 - Authority
 - Money
 - Penalty

Power

- **Power** is the potential ability to influence behavior to get people to do things they would not otherwise do.
- Types of power include:
 - Coercive power
 - Legitimate power
 - Expert power
 - Reward power
 - Referent power

Improving Effectiveness: Covey's Seven Habits

- Project managers can apply Covey's seven habits to improve effectiveness on projects.
 - Be proactive.
 - Begin with the end in mind.
 - Put first things first.
 - Think win/win.
 - Seek first to understand, then to be understood.
 - Synergize.
 - Sharpen the saw.

Empathic Listening and Rapport

- Good project managers are **empathic listeners**, meaning they listen with the intent to understand.
- Before you can communicate with others, you have to have **rapport**, which is a relation of harmony, conformity, accord, or affinity.
- **Mirroring** is the matching of certain behaviors of the other person, and is a technique used to help establish rapport.
- IT professionals need to develop empathic listening and other people skills to improve relationships with users and other stakeholders.

What Went Right?

- Best practices for ensuring partnerships between people in business and technology areas include:
 - Requiring business people, not IT people, to take the lead in determining and justifying investments in new computer systems.
 - Having CIOs push their staff to recognize that the needs of the business must drive all technology decisions.
 - Reshaping IT units to look and perform like consulting firms.

Organizational Planning

- Involves identifying and documenting project roles, responsibilities, and reporting relationships.
- Outputs include:
 - Project organizational charts
 - Staffing management plans
 - Responsibility assignment matrixes
 - Resource histograms

Figure 9-2. Sample Organizational Chart for a Large IT Project

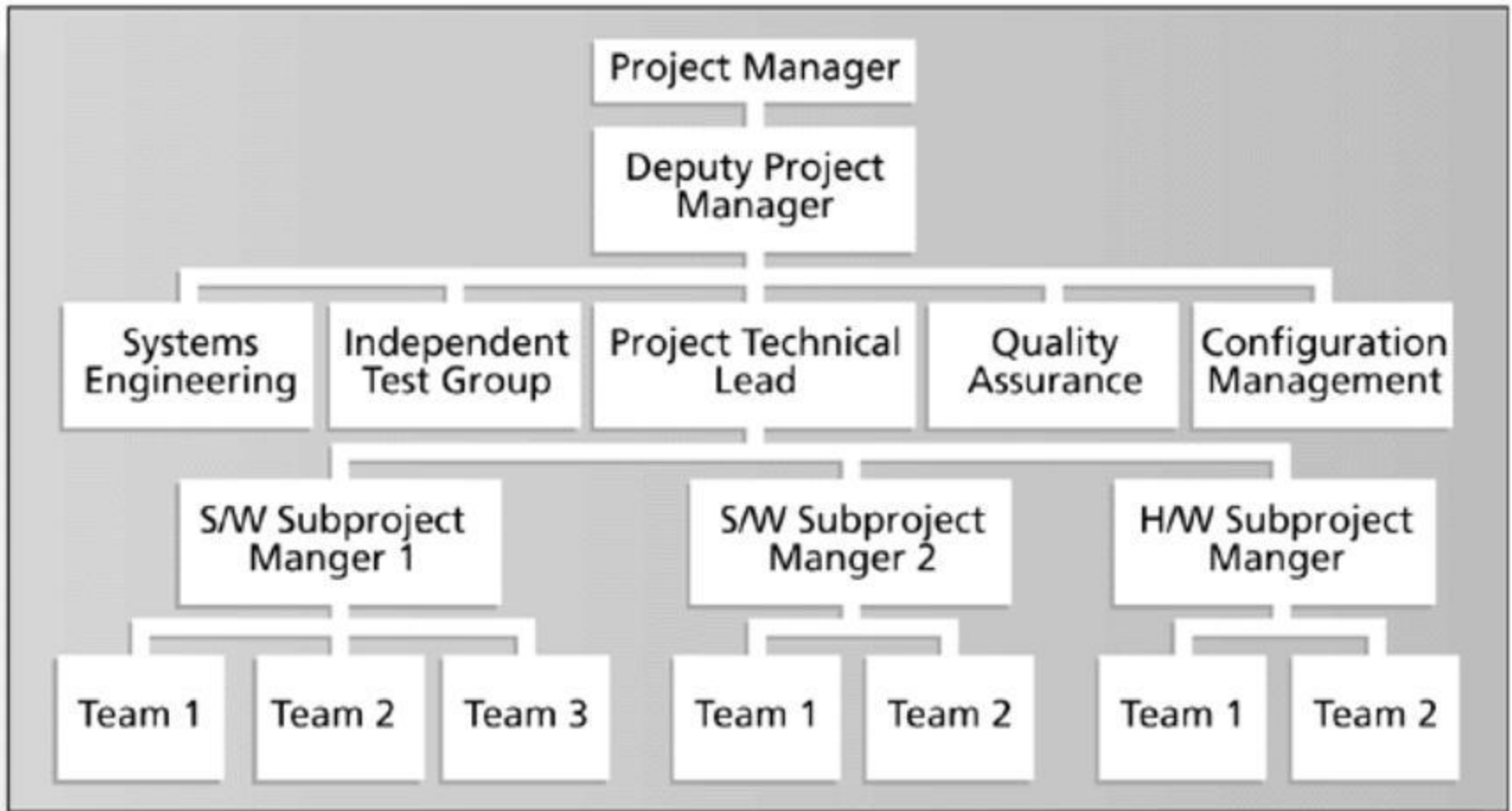
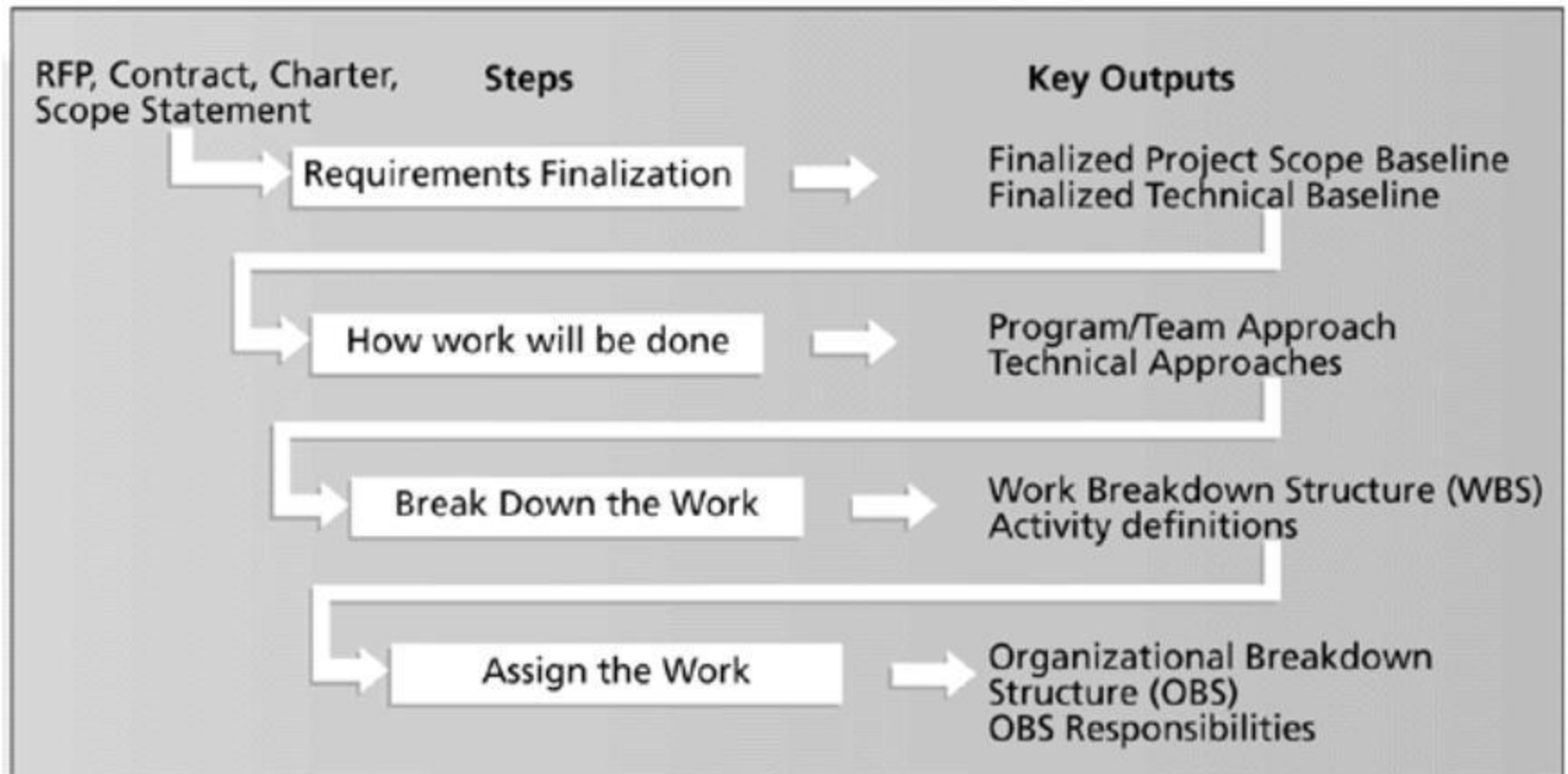


Figure 9-3. Work Definition and Assignment Process



Responsibility Assignment Matrixes

- A **responsibility assignment matrix (RAM)** is a matrix that maps the work of the project, as described in the WBS, to the people responsible for performing the work, as described in the OBS.
- Can be created in different ways to meet unique project needs.

Figure 9-4. Sample Responsibility Assignment Matrix (RAM)

		WBS activities →							
		1.1.1	1.1.2	1.1.3	1.1.4	1.1.5	1.1.6	1.1.7	1.1.8
OBS units ↓	Systems Engineering	R	RP					R	
	Software Development			RP					
	Hardware Development				RP				
	Test Engineering	P							
	Quality Assurance					RP			
	Configuration Management						RP		
	Integrated Logistics Support							P	
	Training								RP

R = Responsible organizational unit
P = Performing organizational unit

Figure 9-5. RAM Showing Stakeholder Roles

Items	Stakeholders				
	A	B	C	D	E
Unit Test	S	A	I	I	R
Integration Test	S	P	A	I	R
System Test	S	P	A	I	R
User Acceptance Test	S	P	I	A	R

A = Accountable

P = Participant

R = Review Required

I = Input Required

S = Sign-off Required

Table 9-1. Sample RACI Chart

	GROUP A	GROUP B	GROUP C	GROUP D	GROUP E
Test Plans	R	A	C	C	I
Unit Test	C	I	R	A	I
Integration Test	A	R	I	C	C
System Test	I	C	A	I	R
User Acceptance Test	A	I	C	R	A

R = Responsibility, only one R per task

A = Accountability

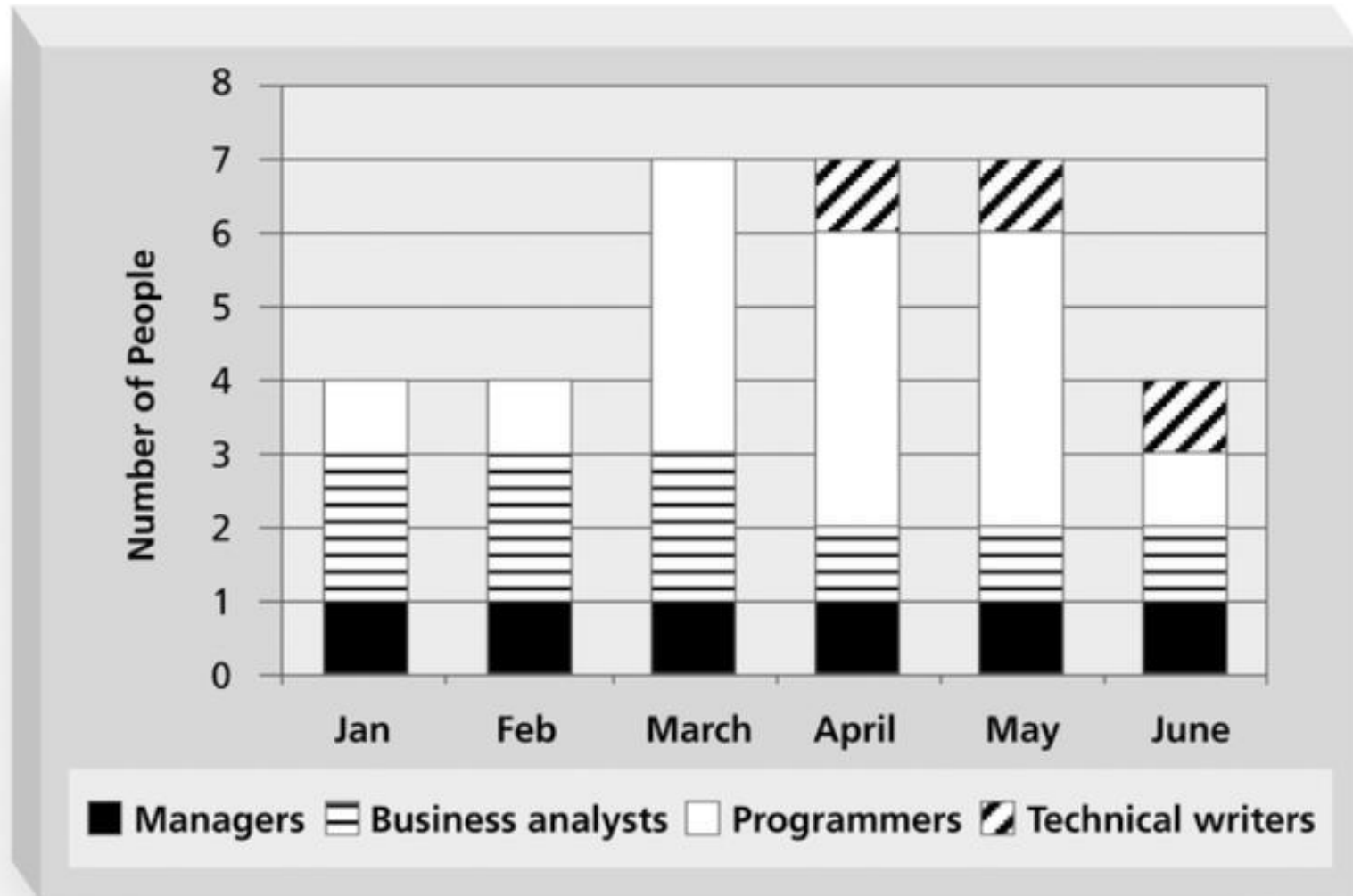
C = Consultation

I = Informed

Staffing Management Plans and Resource Histograms

- A **staffing management plan** describes when and how people will be added to and taken off the project team.
- A **resource histogram** is a column chart that shows the number of resources assigned to a project over time.

Figure 9-6. Sample Resource Histogram



Acquiring the Project Team

- Acquiring qualified people for teams is crucial.
- The project manager who is the smartest person on the team has done a poor job of recruiting!
- Staffing plans and good hiring procedures are important, as are incentives for recruiting and retention.
 - Some companies give their employees one dollar for every hour that a new person who they helped hire works.
 - Some organizations allow people to work from home as an incentive.

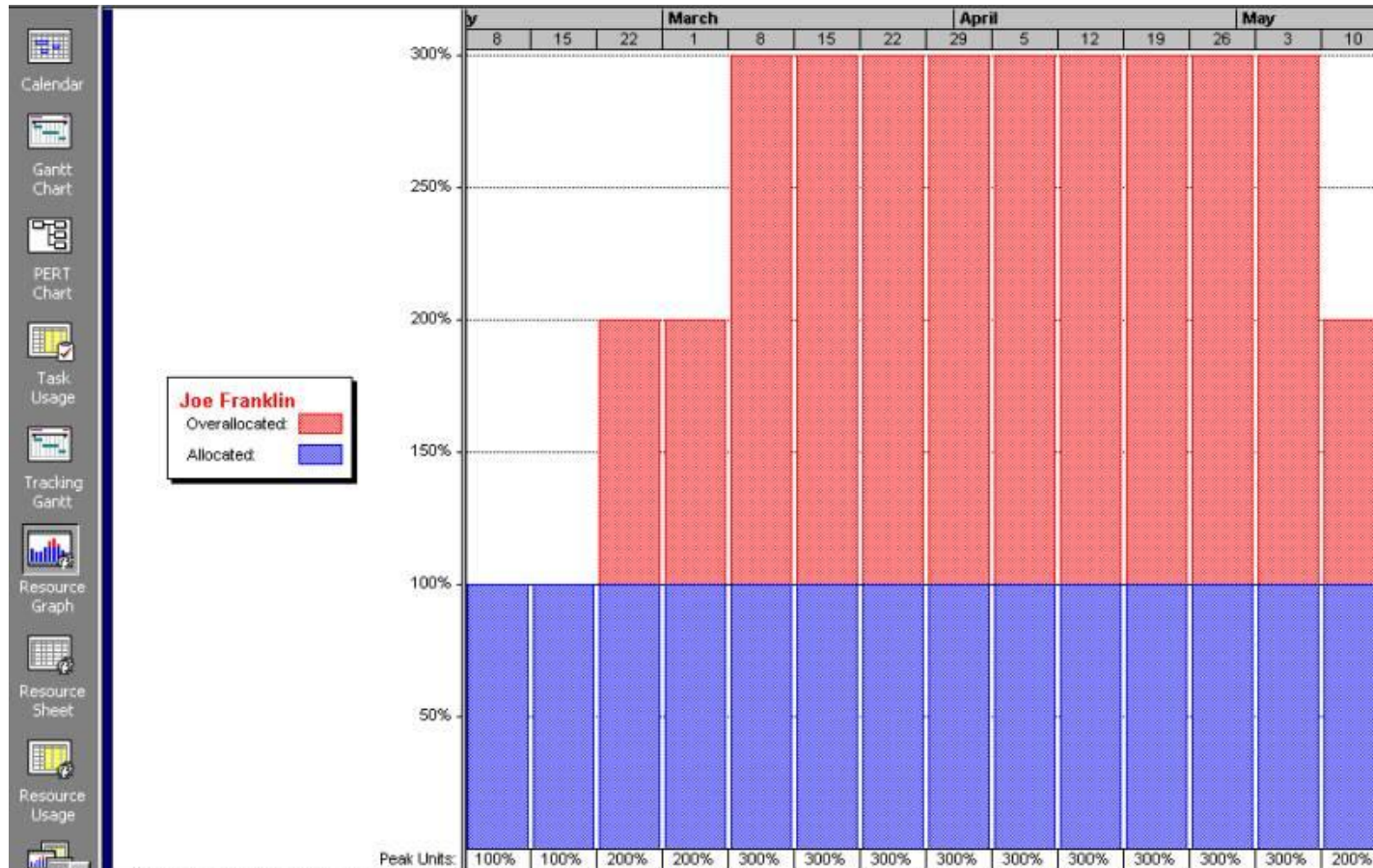
Why People Leave Their Jobs

- They feel they do not make a difference.
- They do not get proper recognition.
- They are not learning anything new or growing as a person.
- They do not like their coworkers.
- They want to earn more money.

Resource Loading

- **Resource loading** refers to the amount of individual resources an existing schedule requires during specific time periods.
- Helps project managers develop a general understanding of the demands a project will make on the organization's resources and individual people's schedules.
- **Overallocation** means more resources than are available are assigned to perform work at a given time.

Figure 9-7. Sample Histogram Showing an Overallocated Individual

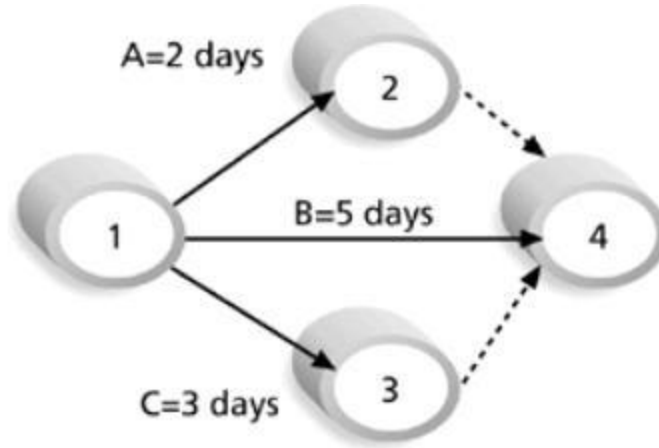


What's wrong with this picture? Assume 100 percent means Joe is working eight hours per day.

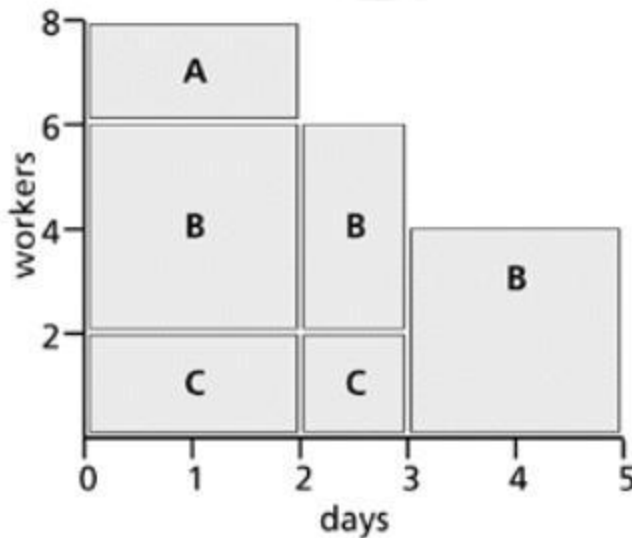
Resource Leveling

- **Resource leveling** is a technique for resolving resource conflicts by delaying tasks.
- The main purpose of resource leveling is to create a smoother distribution of resource use and reduce overallocation.

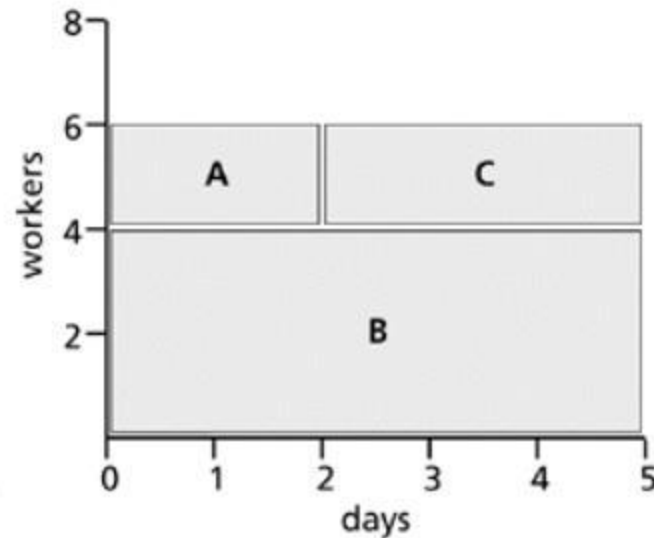
Figure 9-8. Resource Leveling Example



The project network with Activities A, B, and C and durations as shown. Activity A has 3 days of slack, and Activity C has 2 days of slack. Assume Activity A has 2 workers, B has 4 workers, and C has 2 workers.



Resource usage if all Activities start on day one



Resource usage if Activity C is delayed 2 days, its total slack

Benefits of Resource Leveling

- When resources are used on a more constant basis, they require less management.
- It may enable project managers to use a just-in-time inventory type of policy for using subcontractors or other expensive resources.
- It results in fewer problems for project personnel and the accounting department.
- It often improves morale.

Developing the Project Team

- The main goal of **team development** is to help people work together more effectively to improve project performance.
- It takes teamwork to successfully complete most projects.

Tuckman Model of Team Development

- Forming
- Storming
- Norming
- Performing
- Adjourning

Training

- Training can help people understand themselves and each other, and understand how to work better in teams.
- Team building activities include:
 - Physical challenges
 - Psychological preference indicator tools

Myers-Briggs Type Indicator (MBTI)

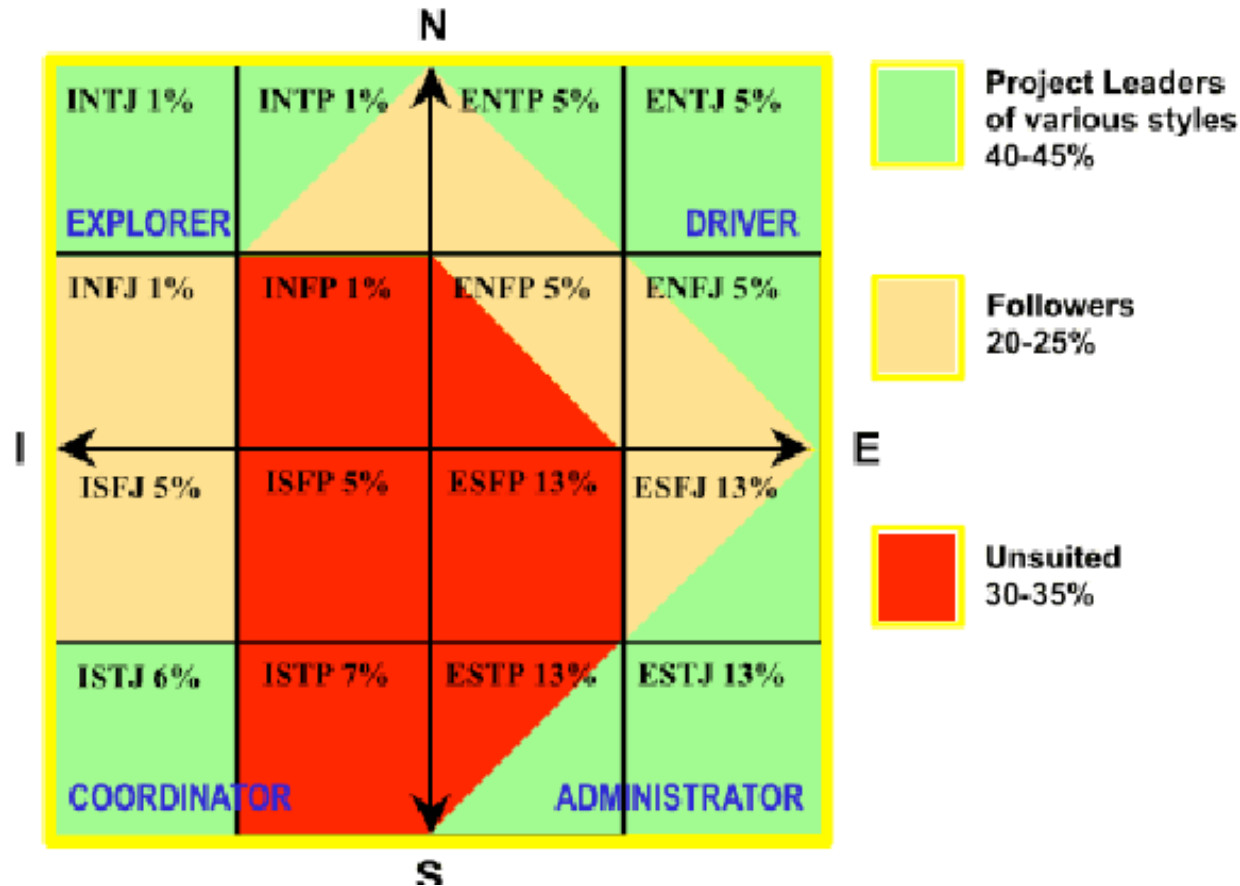
- MBTI is a popular tool for determining personality preferences and helping teammates understand each other.
- Four dimensions include:
 - Extrovert/Introvert (E/I)
 - Sensation/Intuition (S/N)
 - Thinking/Feeling (T/F)
 - Judgment/Perception (J/P)
- NTs, or rationals, are attracted to technology fields.
- IT people vary most from the general population in their tendency to not be extroverted or sensing.

Wideman and Shenhar's Views on MBTI and Project Management*

- Most suited for project leadership:
 - 100 percent: INTJ, ENTJ, ISTJ, ESTJ
 - 50 percent: INTP, ENTP, ENFP, ENFJ
- Best suited as followers:
 - 100 percent: INFJ, ISFJ
 - 50 percent: INTP, ENTP, ENFP, ENFJ, ESFJ
- Not suited for project work:
 - 100 percent: INFP, ISFP, ESFP, ISTP
 - 50 percent: ENFP, ESTP

*Wideman, R. Max and Aaron J. Shenhar, "Professional and Personal Development: A Practical Approach to Education and Training," *Project Management for Business Professionals*, edited by Joan Knutson, 2001, p. 375.

MBTI and Suitability to Project Work*



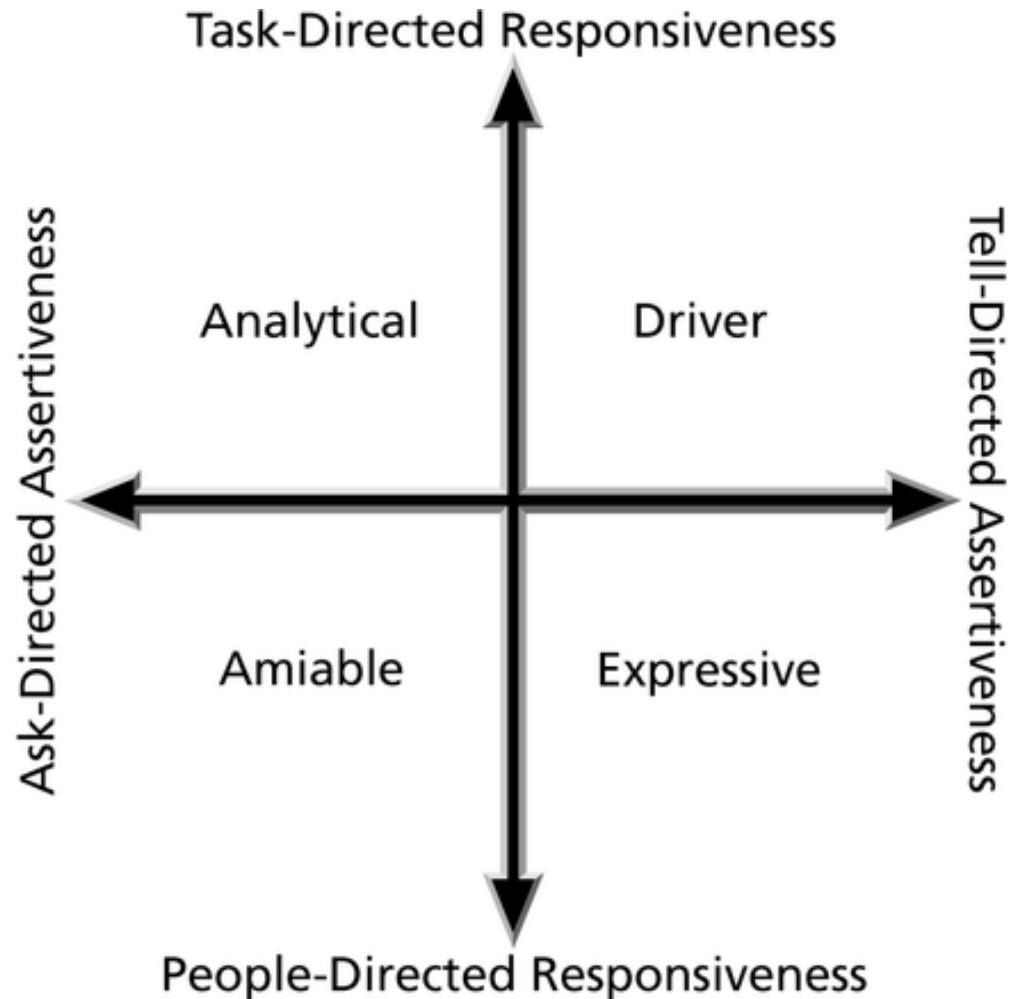
What do you think about these views?

*Wideman, R. Max. "Project Teamwork, Personality Profiles and the Population at Large: Do we have enough of the right kind of people?" (<http://www.maxwideman.com/papers/profiles/profiles.pdf>).

Social Styles Profile

- People are perceived as behaving primarily in one of four zones, based on their assertiveness and responsiveness:
 - Drivers
 - Expressives
 - Analyticals
 - Amiables
- People on opposite corners (drivers and amiables, analyticals and expressives) may have difficulty getting along.

Figure 9-9. Social Styles



Reward and Recognition Systems

- Team-based reward and recognition systems can promote teamwork.
- Focus on rewarding teams for achieving specific goals.
- Allow time for team members to mentor and help each other to meet project goals and develop human resources.

Managing the Project Team

- Project managers must lead their teams in performing various project activities.
- After assessing team performance and related information, the project manager must decide:
 - If changes should be requested to the project.
 - If corrective or preventive actions should be recommended.
 - If updates are needed to the project management plan or organizational process assets.

Tools and Techniques for Managing Project Teams

- Observation and conversation
- Project performance appraisals
- Conflict management
- Issue logs

General Advice on Teams

- Be patient and kind with your team.
- Fix the problem instead of blaming people.
- Establish regular, effective meetings.
- Allow time for teams to go through the basic team-building stages.
- Limit the size of work teams to three to seven members.

General Advice on Teams (cont'd)

- Plan some social activities to help project team members and other stakeholders get to know each other better.
- Stress team identity.
- Nurture team members and encourage them to help each other.
- Take additional actions to work with virtual team members.

Using Software to Assist in Human Resource Management

- Software can help produce RAMS and resource histograms.
- By using project management software for human resource management, you can:
 - Assign resources.
 - Identify potential resource shortages or underutilization.
 - Level resources.

Project Resource Management Involves Much More Than Using Software

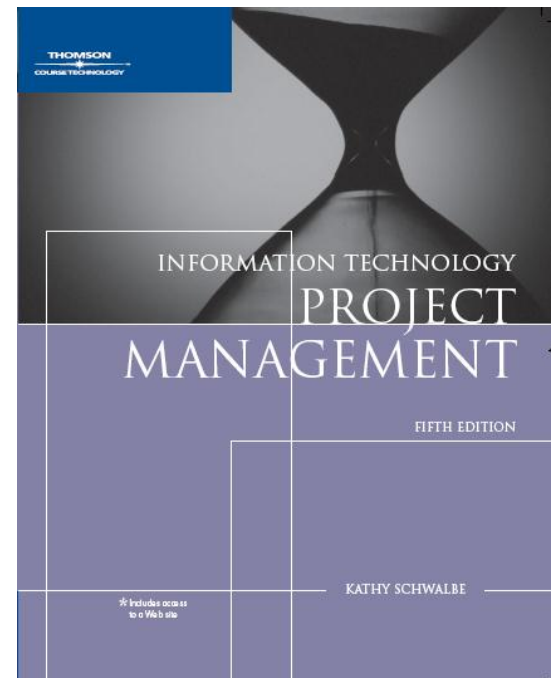
- Project managers must:
 - Treat people with consideration and respect.
 - Understand what motivates people.
 - Communicate carefully with people.
- Focus on your goal of enabling project team members to deliver their best work.

Chapter Summary

- Project human resource management includes the processes required to make the most effective use of the people involved with a project.
- Main processes include:
 - Human resource planning
 - Acquiring the project team
 - Developing the project team
 - Managing the project team

Chapter 10: Project Communications Management

Information Technology Project Management, Fifth Edition



Learning Objectives

- Understand the importance of good communications in projects
- Explain the elements of project communications planning, including how to create a communications management plan and perform a stakeholder communications analysis
- Describe various methods for distributing project information and the advantages and disadvantages of each, discuss the importance of addressing individual communication needs, and calculate the number of communications channels in a project

Learning Objectives (continued)

- Understand how the main outputs of performance reporting help stakeholders stay informed about project resources
- Recognize the importance of good communications management for stakeholder relationships and for resolving issues
- List various methods for improving project communications, such as managing conflicts, running effective meetings, using e-mail and other technologies effectively, and using templates
- Describe how software can enhance project communications management

Importance of Good Communications

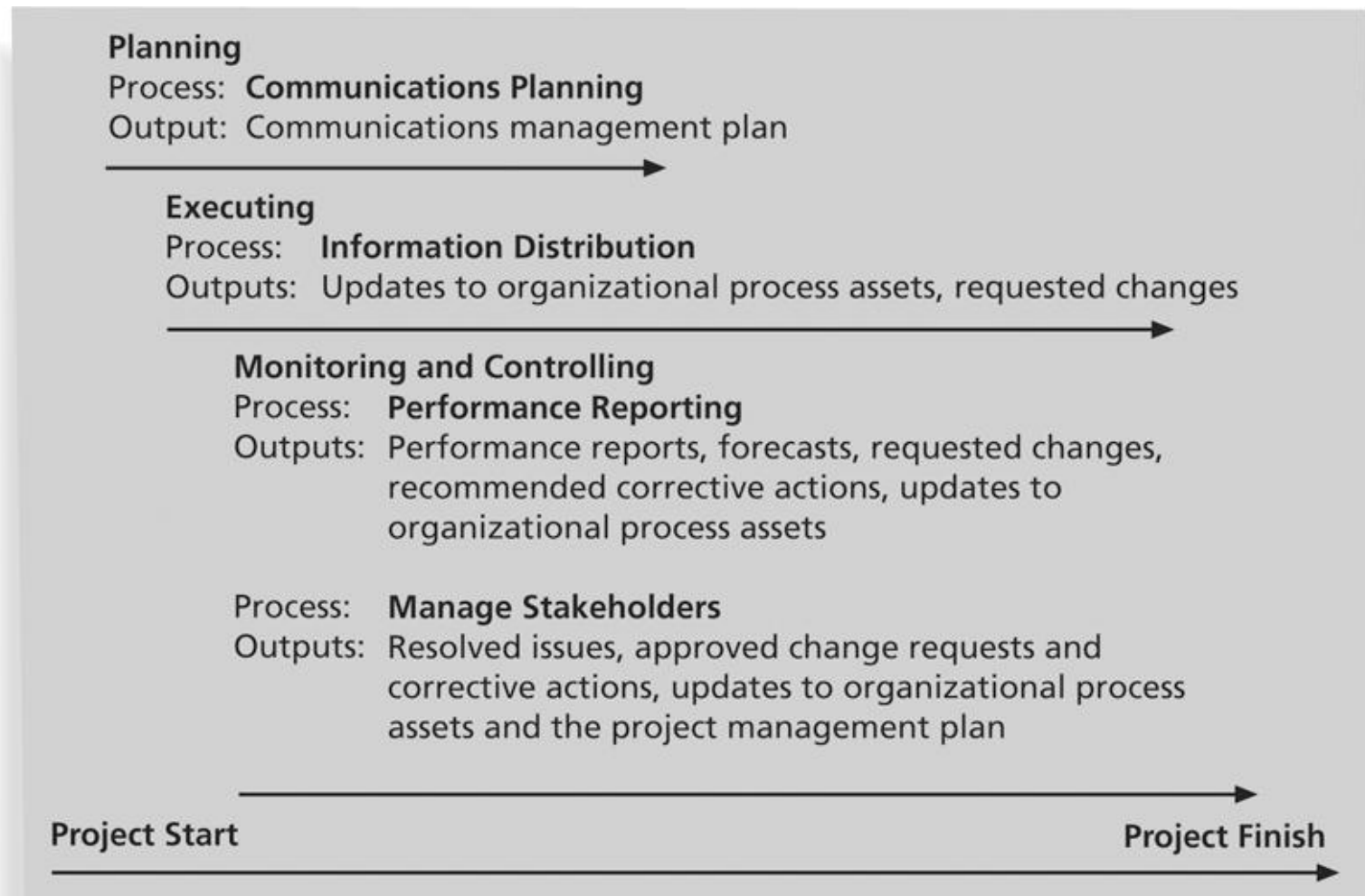
- The greatest threat to many projects is a failure to communicate
- Our culture does not portray IT professionals as being good communicators
- Research shows that IT professionals must be able to communicate effectively to succeed in their positions
- Strong verbal skills are a key factor in career advancement for IT professionals

Project Communications

Management Processes

- **Communications planning:** determining the information and communications needs of the stakeholders
- **Information distribution:** making needed information available to project stakeholders in a timely manner
- **Performance reporting:** collecting and disseminating performance information, including status reports, progress measurement, and forecasting
- **Managing stakeholders:** managing communications to satisfy the needs and expectations of project stakeholders and to resolve issues

Figure 10-1: Project Communications Management Summary



Communications Planning

- Every project should include some type of **communications management** plan, a document that guides project communications
- Creating a stakeholder analysis for project communications also aids in communications planning

Communications Management Plan Contents

- Stakeholder communications requirements
- Information to be communicated, including format, content, and level of detail
- The people who will receive the information and who will produce it
- Suggested methods or technologies for conveying the information

Communications Management Plan Contents (continued)

- Frequency of communication
- Escalation procedures for resolving issues
- Revision procedures for updating the communications management plan
- A glossary of common terminology

Table 10-1: Sample Stakeholder Analysis for Project Communications

STAKEHOLDERS	DOCUMENT NAME	DOCUMENT FORMAT	CONTACT PERSON	DUE
Customer management	Monthly status report	Hard copy	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	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, 2008
Software subcontractor	Software implementation plan	E-mail	Najwa Gates	June 1, 2008

Comments: Put the titles and dates of documents in e-mail headings and have recipients acknowledge receipt.

Information Distribution

- 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

What Went Wrong?

- Telecommunications throughout Asia were severely disrupted on December 26, 2006, after earthquakes off Taiwan damaged undersea cables, slowing Internet services and hindering financial transactions, particularly in the currency market
- International telephone traffic was restricted from some countries, and Internet access slowed to a crawl

Distributing Information in an Effective and Timely Manner

- 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

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

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

Table 10-2: Media Choice Table

HOW WELL MEDIUM IS SUITED TO:	KEY: 1 = EXCELLENT		2 = ADEQUATE		3 = INAPPROPRIATE	
	HARD COPY	TELEPHONE CALL	VOICE MAIL	E-MAIL	MEETING	WEB SITE
Assessing commitment	3	2	3	3	1	3
Building consensus	3	2	3	3	1	3
Mediating a conflict	3	2	3	3	1	3
Resolving a misunderstanding	3	1	3	3	2	3
Addressing negative behavior	3	2	3	2	1	3
Expressing support/appreciation	1	2	2	1	2	3
Encouraging creative thinking	2	3	3	1	3	3
Making an ironic statement	3	2	2	3	1	3
Conveying a reference document	1	3	3	3	3	1
Reinforcing one's authority	1	2	3	3	1	2
Providing a permanent record	1	3	3	1	3	1
Maintaining confidentiality	2	1	2	3	1	3
Conveying simple information	3	2	1	1	2	3
Asking an informational question	3	2	1	1	3	3
Making a simple request	3	3	1	1	3	3
Giving complex instructions	3	3	3	2	1	2
Addressing many people	2	3	3 or 1*	2	3	1

Galati, Tess. Email Composition and Communication (EmC2) Practical Communications, Inc. (www.praccomm.com) (2001).

*Depends on system functionality

What Went Right?

- Collaboration is a key driver of overall performance of companies around the world
- Of all the collaboration technologies that were studied, three were more commonly present in high-performing companies than in low-performing ones: Web conferencing, audio conferencing, and meeting-scheduler technologies
- “This study reveals a powerful new metric business leaders can use to more successfully manage their companies and achieve competitive advantage,” said Brian Cotton, a vice president at Frost & Sullivan*
- The study also showed that there are regional differences in how people in various countries prefer to communicate with one another

*Frost & Sullivan, “New Research Reveals Collaboration Is a Key Driver of Business

Performance Around the World,” Microsoft PressPass (June 5, 2006).

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Understanding Group and Individual 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**

Personal Preferences 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

Other Communication Considerations

- Rarely does the receiver interpret a message exactly as the sender intended
- Geographic location and cultural background affect the complexity of project communications
 - Different working hours
 - Language barriers

Setting the Stage for Communicating Bad News

Dear Mom and Dad, or should I say Grandma & Grandpa,

Yes, I am pregnant. No, I'm not married yet since Larry, my boyfriend, is out of a job. Larry's employers just don't seem to appreciate the skills he has learned since he quit high school. Larry looks much younger than you, Dad, even though he is three years older. I'm quitting college and getting a job so we can get an apartment before the baby is born. I found a beautiful apartment above a 24-hour auto repair garage with good insulation so the exhaust fumes and noise won't bother us.

I'm very happy. I thought you would be too.

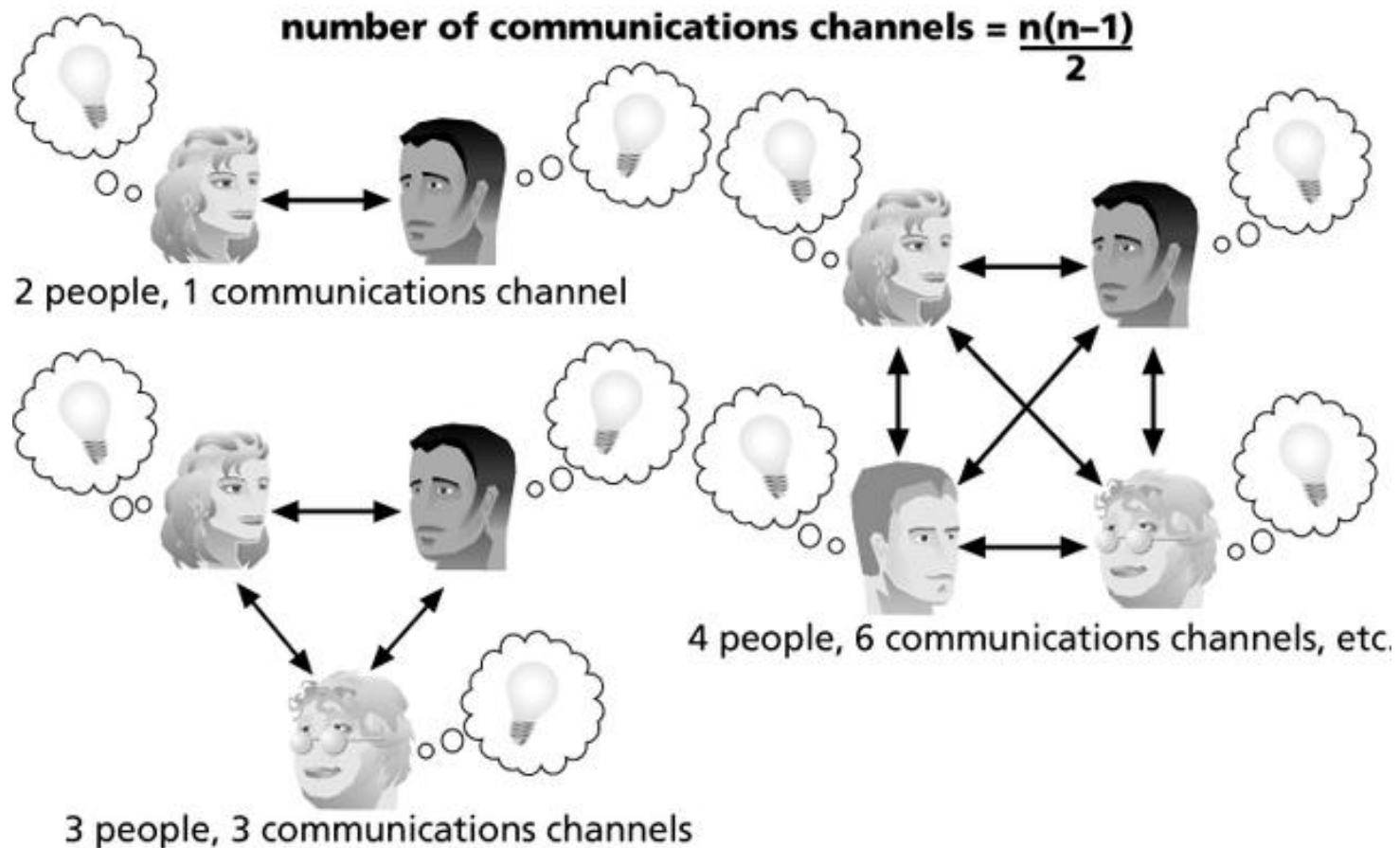
Love, Ashley

P.S. There is no Larry. I'm not pregnant. I'm not getting married. I'm not quitting school, but I am getting a "D" in Chemistry. I just wanted you to have some perspective.

Determining the Number of Communications Channels

- 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 = $\frac{n(n-1)}{2}$

Figure 10-2: The Impact of the Number of People on Communications



Performance Reporting

- Performance reporting keeps stakeholders informed about how resources are being used to achieve project objectives
 - **Status reports** describe where the project stands at a specific point in time
 - **Progress reports** describe what the project team has accomplished during a certain period of time
 - **Forecasts** predict future project status and progress based on past information and trends

Managing Stakeholders

- Project managers must understand and work with various stakeholders
- Need to devise a way to identify and resolve issues
- Two important tools include:
 - Expectations management matrix

Table 10-3: Expectations Management Matrix

MEASURE OF SUCCESS	PRIORITY	EXPECTATIONS	GUIDELINES
Scope	2	The scope statement clearly defines mandatory requirements and optional requirements.	Focus on meeting mandatory requirements before considering optional ones.
Time	1	There is no give in the project completion date. Every major deadline must be met, and the schedule is very realistic.	The project sponsor and program manager must be alerted if there are any issues that might affect meeting schedule goals.
Cost	3	This project is crucial to the organization. If you can clearly justify the need for more funds, they can be made available.	There are strict rules for project expenditures and escalation procedures. Cost is very important, but it takes a back seat to meeting schedule and then scope goals.
Quality	6	Quality is important, and the expectation is that we follow our well-established processes for testing this system.	All new personnel are required to complete several in-house courses to make sure they understand our quality processes. All corporate quality standards must be followed.
Customer Satisfaction	4	Our customer expects us to act professionally, answer questions in a timely manner, and work collaboratively with them to get the project done.	All presentations and formal documents provided to the customer must be edited by a tech writer. Everyone should reply to customer requests within 24 hours.
ROI Projections	5	The business case for this project projected an ROI of 40% within two years after implementation.	Our finance department will work with the customer to measure the ROI. Meeting/exceeding this projection will help us bring in future business with this and other customers.
Etc.			

Table 10-4: Issue Log

ISSUE #	ISSUE DESCRIPTION	IMPACT ON PROJECT	DATE REPORTED	REPORTED BY	ASSIGNED TO	PRIORITY (M/H/L)	DUE DATE	STATUS	COMMENTS
1	Servers cost 10% more than planned	Slight increase in project cost	5/15	Jean	Oded	M	6/15	Closed	The sponsor agreed to provide additional funds to meet the deadline.
2	Two people left the project	Need to reassign personnel	9/26	Gaurav	Karen	H	10/2	Open	If Karen cannot reassign people within a week, she should talk to Peter directly.
Etc.									

Suggestions for Improving Project Communications

- Manage conflicts effectively
- Develop better communication skills
- Run effective meetings
- Use e-mail and other technologies effectively
- Use templates for project communications

Conflict Handling Modes

- 1. Confrontation:** directly face a conflict using a problem-solving approach
- 2. Compromise:** use a give-and-take approach
- 3. Smoothing:** de-emphasize areas of difference and emphasize areas of agreement
- 4. Forcing:** the win-lose approach
- 5. Withdrawal:** retreat or withdraw from an actual or potential disagreement

Conflict Can Be Good

- Conflict often produces important results, such as new ideas, better alternatives, and motivation to work harder and more collaboratively
- **Groupthink:** conformance to the values or ethical standards of a group; groupthink can develop if there are no conflicting viewpoints
- Research suggests that task-related conflict often improves team performance, but

Developing Better Communication Skills

- Companies and formal degree programs for IT professionals often neglect the importance of speaking, writing, and listening skills
- As organizations become more global, they realize they must invest in ways to improve communication with people from different countries and cultures

What Went Wrong?

- Communications technology, such as using e-mail and searching the Web, should help improve project communications, but it can also cause conflict
- How? Cyberslackers are people who should be working, but instead spend their time online doing non-work-related activities, such as annoying friends or coworkers by sending unimportant e-mails
- A recent study by Websense suggested that employees are using the Web more and more for personal reasons, and it is costing U.S. companies \$178 billion annually, or \$5,000 per employee
- In 2000, Internet security company Surfcontrol estimated that every employee in Australia was taking the equivalent of a two-week “cyber-holiday” each year, costing the nation \$22.5 billion annually

Running Effective Meetings

- Determine if a meeting can be avoided
- Define the purpose and intended outcome of the meeting
- Determine who should attend the meeting
- Provide an agenda to participants before the meeting
- Prepare handouts and visual aids, and make logistical arrangements ahead of time
- Run the meeting professionally

Using E-Mail, Instant Messaging, and Collaborative Tools Effectively

- Make sure that e-mail, instant messaging, or collaborative tools are an appropriate medium for what you want to communicate
- Be sure to send information to the right people
- Use meaningful subject lines and limit the content of emails to one main subject, and be as clear and concise as possible
- Be sure to authorize the right people to share and edit your collaborative documents

Best Practice

- In June 2006, CIO magazine surveyed information technology executives on their best practices for managing innovation in business
- When asked what technologies they plan to implement or leverage in the coming year:
 - 54 percent of respondents reported handheld PCs/PDAs as the most important hardware
 - 56 percent cited Web services as the most important software
 - 53 percent cited wireless technologies as the most important Internet technology
- All three of these technologies will help organizations improve communications by allowing workers to communicate any time and anywhere

Using Templates for Project Communications

- Many technical people are afraid to ask for help
- Providing examples and templates for project communications saves time and money
- Organizations can develop their own templates, use some provided by outside organizations, or use samples from textbooks
- Recall that research shows that companies that excel in project management make effective use of templates

Figure 10-3: Sample Template for a Project Description

Project X Description

Objective: Describe the objective of the project in one or two sentences. Focus on the business benefits of doing the project.

Scope: Briefly describe the scope of the project. What business functions are involved, and what are the main products the project will produce?

Assumptions: Summarize the most critical assumptions for the project.

Cost: Provide the total estimated cost of the project. If desired, list the total cost each year.

Schedule: Provide summary information from the project's Gantt chart, as shown. Focus on summary tasks and milestones.

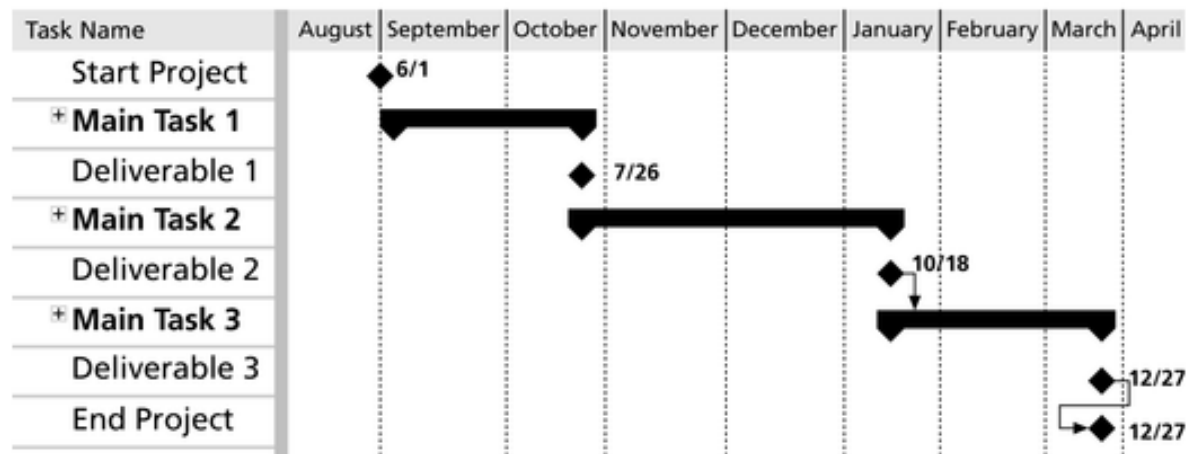


Table 10-5: Sample Template for a Monthly Progress Report

I. Accomplishments for Month of January (or appropriate month):

- Describe most important accomplishments. Relate to project's Gantt chart.
- Describe other important accomplishments, one bullet for each. If any issues were resolved from the previous month, list them as accomplishments.

II. Plans for February (or following month):

- Describe most important items to be accomplished in the next month. Again, relate to the project's Gantt chart.
- Describe other important items to accomplish, one bullet for each.

III. Issues: Briefly list important issues that surfaced or are still important. Managers hate surprises and want to help the project succeed, so be sure to list issues.

IV. Project Changes (Date and Description): List any approved or requested changes to the project. Include the date of the change and a brief description.

Table 10-6: Final Project Documentation Items

- | | |
|--------------|---|
| I. | Project description |
| II. | Project proposal and backup data (request for proposal, statement of work, proposal correspondence, and so on) |
| III. | Original and revised contract information and client acceptance documents |
| IV. | Original and revised project plans and schedules (WBS, Gantt charts and network diagrams, cost estimates, communications management plan, etc.) |
| V. | Design documents |
| VI. | Final project report |
| VII. | Deliverables, as appropriate |
| VIII. | Audit reports |
| IX. | Lessons-learned reports |
| X. | Copies of all status reports, meeting minutes, change notices, and other written and electronic communications |

Lessons Learned Reports

- The project manager and project team members should each prepare a **lessons-learned report**
 - A reflective statement that documents important things an individual learned from working on the project
- The project manager often combines information from all of the lessons-learned reports into a project summary report

Project Archives

- It is also important to organize and prepare project archives
- **Project archives** are a complete set of organized project records that provide an accurate history of the project
- These archives can provide valuable information for future projects as well

Project Web Sites

- Many project teams create a project Web site to store important product documents and other information
- Can create the site using various types of software, such as enterprise project management software

Figure 10-4: Microsoft Office Enterprise Project Management

Project Web Access

Welcome North Mary

Office Project Web Access

Home

Site Actions

Project Center

New | Actions | Go To | Settings | View: Summary

Edit | Edit Project Properties | Build Team | Resource Plan

Project Name	Projec Schedule Status	Project Cost Statu	Start	Finish	%
Business Drivers.Expand into new markets and segments			12/16/2005	2/26/2007	
Portable Satellite Radio Product Dev	●	●	1/9/2006	2/26/2007	
Marine Satellite Radio Product Dev	?	●	1/9/2006	2/26/2007	
Satellite Products Production Line Installation	●	●	3/24/2006	6/29/2006	
Satellite Radio Product Development Program	●	●	12/16/2005	2/26/2007	
Production Expansion Program	●	●	1/2/2006	9/8/2006	
2132 Hoover Assembly Building Remodel	●	●	1/2/2006	9/8/2006	
Business Drivers.Improve customer satisfaction score			1/1/2007	12/27/2007	
IT Infrastructure Support 07			1/1/2007	12/27/2007	
Business Drivers.Improve employee satisfaction			1/23/2005	4/20/2006	
CBT Implementation TD	●	●	1/23/2006	4/20/2006	
Business Drivers.Increase market share in existing markets			1/9/2005	2/26/2007	
Boat Show	●	●	5/23/2006	8/1/2006	
Consumer Technology Show	●	●	10/10/2006	1/1/2007	
Business Launch Event			9/22/2006	9/22/2006	

My Work

- My Tasks
- My Timesheets
- Issues and Risks

Projects

- Project Center
- Proposals and Activities

Resources

- Resource Center
- Status Reports

Reporting

- Data Analysis

Approvals

- Task Updates
- Timesheet
- Administrative Time

Personal Settings

Server Settings

Lists

- Proposal proxy list

Documents

- Shared Documents

Using Software to Assist in Project Communications

- There are many software tools to aid in project communications
- Today, many people telecommute or work remotely at least part-time
- Project management software includes new capabilities to enhance virtual communications
- New tools, such as instant messaging and blogs, can enhance project communications

Chapter Summary

- The goal of project communications management is to ensure timely and appropriate generation, collection, dissemination, storage, and disposition of project information
- Main processes include:
 - Communications planning
 - Information distribution
 - Performance reporting