



Info6007

# Project Management in IT

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Lecture 8 – Monitoring & Control:  
Change, Communication, and  
Reporting.

Dr Steven Sommer



# Assignment 1

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- Collect Assignment 1
- Exercise: (10 mins)
  - In your assignment groups, list
    - 3 things you did really well working as a group
    - 3 things you can do better working as a group.
- Discuss Assignment 2



# Lecture Resources

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- Readings:
  - 8Ed: Ch. 4 (p165-171), and Ch 10
  - 7Ed: Ch. 4 (p169-175), and Ch 10
- Practice Questions from text:
  - Ch. 4, Discussion Question 5
  - Ch. 10, Discussion Questions 4,5,6,9
- References:
  - Schwalbe, K. 2016, *Information Technology Project Management (8e)*  
Cengage Learning



# Lecture Objectives

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- Explain, Demonstrate, and Evaluate Change Control processes
- Explain, Apply, and Evaluate Project Communication processes and techniques.
- Create a communications plan
- Create a status report

# Info6007 Topic Map

	Initiate	Plan	Execute	Monitor and Control	Closing
Integration	Week 1	(All?)	Week 8		
Scope		Week 2			
Time		Week 3, 9			
Cost		Week 6			
Quality		Week 10		Week 8	Week 11
HR		Week 4 (RM), 12 (Lead)			
Comm.		Week 8			
Risk		Week 7			
Procure.		Week 10			
Stakeholder		Week 11			

Lab: Week 5  
Pre-initiation: Week 11

Agile: Week 12



# Agenda

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- Monitoring and Control
  - Change Control
- Communication management
  - General
  - Planning
  - Managing
  - Controlling
  - Status Reports
- Assignment



# Monitoring and Controlling

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- **Monitoring** project work includes collecting, measuring, and disseminating performance information
  - Quiz: Give some examples of tools used to measure and report on the projects  
Consider all the dimensions of project management
- **Controlling** project work includes taking corrective action to keep the project on track, and managing required changes.



## ... managing required changes

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- Do we ever need to make changes on a project? Give examples.
- Consider:
  - Internal changes (more common)
    - Changes that occur inside the project and are inside the project manager's area of control
  - External changes / mandates:
    - Changes outside the project manager's control
  - Scope, quality, time, cost, resources etc.





# Change on IT Projects

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- *Former view*: The project team should strive to do exactly what was planned on time and within budget
- *Problem*: Stakeholders rarely agreed up-front on the project scope; time and cost estimates were inaccurate; the world changes
- *Modern view*: Project management is a process of constant communication and negotiation
- *Solution*: Changes are often beneficial, and the project team should plan for them



# Integrated Change Control

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- Three main objectives of **Integrated Change Control** are:
  - Influencing the factors that create changes to ensure that changes are beneficial
  - Determining that a change has occurred
  - Managing actual changes as they occur
- Changes are determined off the project **baseline**. When a change is approved, the baseline is updated to include it.



# Change Control System

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- A **change control system** is a formal, documented process that describes when and how official project documents and work may be changed
- Describes who is authorized to make changes and how to make them



# Change Control Board (CCB)

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- A **change control board** is a formal group of people responsible for approving or rejecting changes on a project
- CCBs provide guidelines for preparing change requests, evaluate change requests, and manage the implementation of approved changes
- May include stakeholders from the entire organization

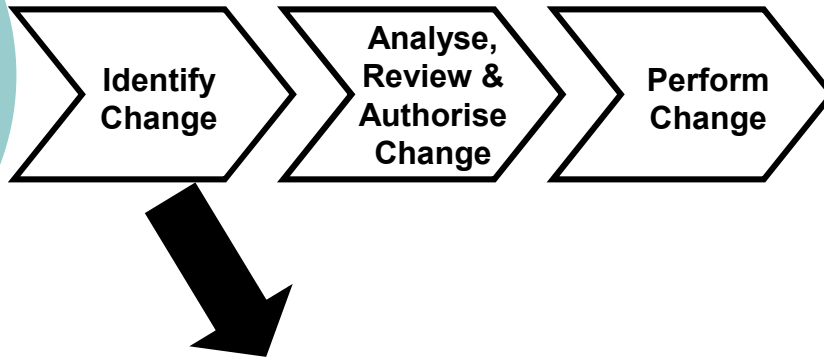


# Change Management Process

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# 1. Identify Change



## Responsibility

- Any Project Team member

## Description

- Identify potential scope change
- Complete Change Request Form
- Submit Change Request Form for analysis

## Outputs

- Updated Change Request Form

Change Request Form		
Project Name:		Raiser of Change Request
Priority		Project Manager
Category of Change	Minor, Material, Major	Date Raised
Change Description		
Short description of change:		Type of Change:
Detailed description of change:		<input type="checkbox"/> Data <input type="checkbox"/> Software <input type="checkbox"/> Procedures <input type="checkbox"/> Scope <input type="checkbox"/> Training
Proposed Solution		
Detailed description of proposed change:		
Assigned Responsibility:		
Impact Analysis: Budget		
Due Date		
Dependencies		
Milestones affected		
Comments on proposed solution		
Comments:		
Approval		
Project Manager:	Signature	Date
Project Sponsor:	Signature	Date

## 2. Analyse, Review & Authorise Change

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### **Responsibility**

- Team Leader (Analyse / Review)
- Project Manager (Analyse / Review / Track / Authorise)
- Project Sponsor / Steering Committee (Authorise)

### **Description**

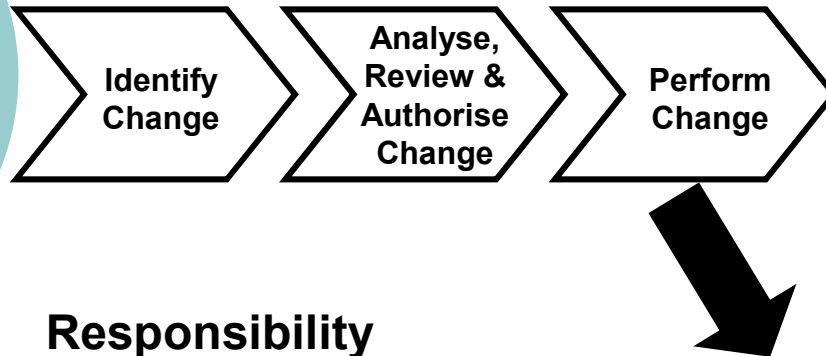
- Review information provided in the Change Request Form
- Determine if the change requested impacts time, effort or budget
- Review scope documentation
- Escalate Change Request to next level, if required
- Track the change through the process
- Authorise / Reject / Defer the change
- Communicate final decision to original change requestor

### **Outputs**

- Updated Change Request Form

# 3. Perform Change

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## Responsibility

- Project Manager (Plan Change)
- Nominated Project Team Member(s) (Perform Change)

## Description

- Review final outcome as documented in the Change Request Form
- If change request is approved:
  - Update work plans (update tasks, resources, baseline budget, project estimates, time line)
  - Update scope definition document
  - Report scope change in weekly status report / meeting
- Perform change

## Outputs

- Updated work plans
- Updated Project Scope Definition



# Change Management Challenges

- Identifying and agreeing that a “Change” has occurred is a difficult task. It often generates ‘conflict’ which must be managed
- It is often difficult to create a good scope statement and WBS for a project
  - It is often even more difficult to verify project scope changes and to integrate and minimize the resulting scope changes
- **Scope Creep** describes the way increases in scope can often occur gradually with small issues and decisions
  - Many IT projects suffer extensively from scope creep.
- Class examples?





# Quiz

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**Which of these are SQERT areas likely to be affected by a scope change?**

- ☐ Time Management
- ☐ Risk Management
- ☐ Quality Management
- ☐ Effort Management
- ☐ Issue Management



## Exercise

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- Create an formal change control request for an interesting change on one our projects:
  - Week 10 professional video, the wedding, .....
  - One team to present



# Agenda

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- Monitoring and Control
  - Change Control
- **Communication management**
  - **General**
  - **Planning**
  - **Managing**
  - **Controlling**
  - Status Reports

# 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.*



## Importance of Good Communications

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- The greatest threat to many projects is a failure to communicate [Schwalbe 2013]
- 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 [Schwalbe 2013]
- Strong verbal and non-technical skills are a key factor in career advancement for IT professionals
- Project managers say they spend as much as 90 percent of their time communicating



# Project Communications Management Processes

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1. **Planning communications management:** Determining the processes, information and communications needs of the stakeholders
2. **Managing communications:** Creating, distributing, storing, retrieving, and disposing of project communications based on the communications management plan
3. **Controlling communications:** Monitoring and controlling project communications to ensure that stakeholder communication needs are met



# 1. Planning Communications Management

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- Every project should include some type of **communications management** plan, a document that guides project communications
- Contents:
  - Stakeholder communications requirements
  - Information to be communicated, including format, content, and level of detail
  - Who will receive the information and who will produce it
  - Suggested methods or technologies for conveying the information
  - Frequency of communication
  - Escalation procedures for resolving issues
  - Revision procedures for updating the communications management plan





# Using Technology to Enhance Creation and Distribution

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- Technology can facilitate the process of creating and distributing information, when used properly
- It is important to select the appropriate communication method and media
- Quiz: What are the options for communicating and collaborating?



# Keys to Good Communications

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- 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
  - 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
- Encourage 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
- Set the stage for communicating bad news



# Classifications for Communication Methods

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- *Interactive communication*: Two or more people interact to exchange information via meetings, phone calls, or video conferencing. 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. Ensures that the information is distributed, but does not ensure that it was received or understood
- *Pull communication*: Information is sent to recipients at their request via Web sites, bulletin boards, e-learning, knowledge repositories like blogs, and other means

# Media Choice Table

KEY: 1 = EXCELLENT

2 = ADEQUATE

3 = INAPPROPRIATE

HOW WELL MEDIUM IS SUITED TO:	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

Schwalbe,  
Table 10-2



# Sample Collaborative Tools

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- Many project teams create a **project Web site** to store important product documents and other information
- A **SharePoint portal** allows users to create custom Web sites to access documents and applications stored on shared devices
- **Google Docs** allow users to create, share, and edit documents, spreadsheets, and presentations online
- A **wiki** is a type of Web site designed to enable anyone who accesses it to contribute or modify Web page content

# Sample Stakeholder Analysis for Project Communications

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 implementation plan	E-mail	Najwa Gates	June 1

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

Schwalbe, Table 10-1  
INFO6007



## 2. Managing Communications

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- Managing communications is a large part of a project manager's job
- Getting project 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



# Project Archives

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- 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





## 3. Controlling Communications

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- The main goal of controlling communications is to ensure the optimal flow of information throughout the entire project life cycle
- The project manager and project team should use their various reporting systems, expert judgment, and meetings to assess how well communications are working. If problems exist, the project manager and team need to take action, which often requires changes to the earlier processes of planning and managing project communications
- It is often beneficial to have a facilitator from outside the project team assess how well communications are working



# Suggestions for Improving Project Communications

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- Develop better communication skills
  - You and the team
- Use e-mail and other technologies effectively
  - You and the team
- Use templates for project communications (next slide)
- Run effective meetings (next slide)



# Running Effective Meetings

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- 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
- Set the ground rules for the meeting



## Templates for Project Communications

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- Many technical people are reluctant 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
- Research shows that companies that excel in project management make effective use of templates [Schwalbe 2013]



# Exercise

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- In groups:
  - Come up with an communications plan for one of our projects
  - One team to present
  - Preparation time: 15 mins



# Agenda

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- Monitoring and Control
  - Change Control
- **Communication management**
  - General
  - Planning
  - Managing
  - Controlling
  - **Status Reports**



# Status Reports

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- Project Status Report
  - Provide timely information regarding a project's status to stakeholders and team members
  - Convey information on project scope, quality, effort / cost, risk and time
  - Document project's performance against the plan
  - Educate and motivate the project team
  - Facilitate the sharing and discussion of critical project information
  - Maintain a "big picture" viewpoint

# Sample Status Report

## Project Details

## SQERT 'Health Check'

## Detailed Status

Project Status Report					
For Period Ending:					
Project Number: <u>1.5.3.3.2</u>		Project Name: _____			
Scheduled Completion: _____					
Forecasted Completion: _____					
Summary					
	Quality	Risk	Scope	Effort	Time
Red	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amber	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Green	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Summary>					
<b>Quality</b>					
▪ <Metrics>					
<b>Risk</b>					
▪ Update of existing risks					
▪ New risks					
<b>Scope</b>					
▪ Update – changes / reasons etc					
<b>Effort / Cost</b>					
▪ Budget vs Actual					
<b>Schedule</b>					
▪ Gantt Chart					
<b>Accomplished this period</b>					
<Update>					
<b>Plans for Next Period</b>					
<Update>					
<b>Issues Requiring Management Attention</b>					
<Update>					



# Sample Template for a Monthly Progress Report

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## **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.

Schwalbe, Table 10-3



# Issues with Reporting

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- Too much detail can mask important information
- Reporting process is often disjointed from planning and monitoring tools
  - Need to retype data or data lost

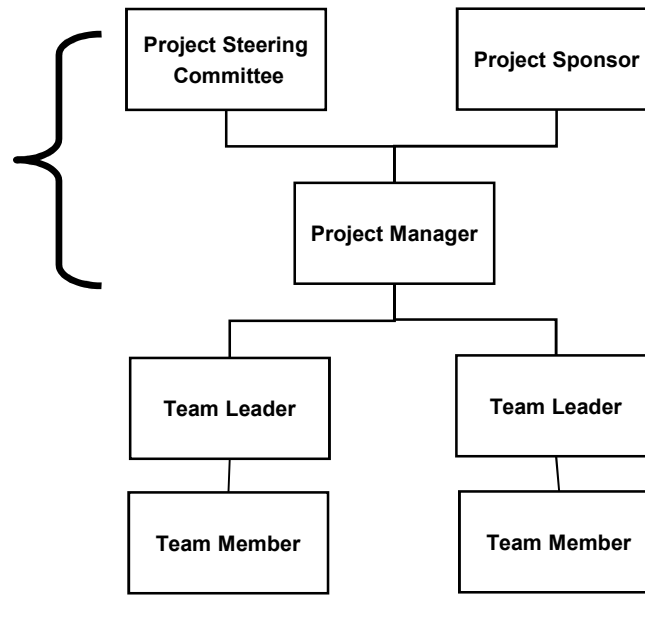
# Status Review Meetings

Meetings are a common means of communicating key issues contained within a Status Report. An example of such a meeting is a Status Review Meeting.

**Status Review Meetings are usually conducted at two levels.**

**Status Review Meetings at the management level are:**

- **Less detailed and exception based**
- **Frequency - monthly or every two weeks**



**Status Review Meetings at the project team level are:**

- **More detailed and more comprehensive**
- **Frequency - weekly**



# Exercise

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- In groups:
  - Come up with an amusing status report for one of our projects
  - One team to present
  - Preparation time: 15 mins



## Summary ...

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- Monitoring and Control
  - Change Control
- Communication management
  - General
  - Planning
  - Managing
  - Controlling
  - Status Reports