PM (Project Management)

International Campus – Kish Sharif University of Technology

Session#9



Course Description

- Instructor
 - Omid Fatahi Valilai, Ph.D. Industrial Engineering Department, Sharif University of Technology
 - Email: Fvalilai@Sharif.edu, Tel: 021-6616-5706
 - Web site: http://sharif.edu/~fvalilai
- Class time

■ Thursday	09:30~12:30-13:00	~16:00- 16:30~19:30
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■ Course evaluation

■ Mid-term	(30%)
Final exam	(40%)
• Quiz	(10%)
Exercise	(20%)

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Course Description (Continued ...)

- *Mid-term session:*
 - 23rd, Aban 1392

■ Reference:

- Kerzner, H., "Project Management—A Systems Approach to Planning, Scheduling, and Controlling, Eighth Edition", 2003, John Wiley & Sons, Inc.
- Lewis, James P.; "Project planning, scheduling, and Control a hands-on guide to bringing projects in on time and on budget", 2001, McGraw-Hill
- Project Management Institute; "A Guide to the Project; Management Body of Knowledge", 5th edition, 2013, Project Management Institute, Inc.

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Course Description (Continued...) Course Calendar: Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr 7 9 12 13 14 15 16 17 20 21 22 23 24 25 5 8 10 18 19 11 28 29 30 4 5 6 7 8 10 11 12 Sep 3 9 Oct Su Mo Tu Tu We Th 5 2 3 4 6 7 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 29 9 10 6,7,8 Tu We Th Fr Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr 5 15 16 17 18 19 20 26 12,13,14 Su Mo Tu We Th Fr 22 23 24 25 26 27 Su Mo Tu We Th 7 8 15 17 20 21 28 29 3 4 5 6 9 10 12 13 16 18 19 nnus - Kish Sharif University of Tech PM (Project Management), Session#9

Course Description (Continued..)

- Contents:
 - Chapter 1 Overview
 - Chapter 2 Project Management Growth—Concepts and Definitions
 - Chapter 3 Organizational Structures
 - Chapter 4 Organizing and Staffing the Project Office and Team
 - Chapter 5 Management Functions
 - Chapter 6 Time Management and Stress
 - Chapter 7 Conflicts
 - Chapter 8 Special Topics
 - Chapter 9 The Variables for Success
 - Chapter 10 Working with Executives
 - Chapter 11 Planning

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Course Description (Continued..)

- Contents:
 - Chapter 12 Network Scheduling
 - Chapter 13 Project Graphics
 - Chapter 14 Pricing and Estimating
 - Chapter 15 Cost Control
 - Chapter 16 Trade-off Analysis in a Project Environment
 - Chapter 17 Risk Management
 - Chapter 18 Learning Curves
 - Chapter 19 Modern Developments in Project Management
 - Chapter 20 Quality Management
 - Chapter 21 Contracts and Procurement
 - Chapter 22 Critical Chain Project Management

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Introduction

- There are several situations or special topics that deserve attention. These include:
 - Performance measurement
 - Compensation and rewards
 - Managing small projects
 - Managing mega projects
 - Morality, ethics and the corporate culture
 - Internal partnerships
 - External partnerships
 - Training and education
 - Integrated project teams

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Chapter 8 - Special Topics

- Performance measurement
 - A good project manager will make it immediately clear to all new functional employees that if they perform well in the project, then he (the project manager) will inform the functional manager of their progress and achievements.
 - In a project management structure, there are basically six ways that a functional employee can be evaluated on a project:
 - The project manager prepares a written, confidential evaluation and gives it to the functional manager.
 - The project manager prepares a non-confidential evaluation and gives it to the functional manager
 - The project manager provides the functional manager with an oral evaluation of the employee's performance
 - The functional manager makes the entire evaluation without any input from the project manager.
 - The project manager makes the entire evaluation for the functional manager.
 - All project and functional managers jointly evaluate all project functional employees at the same time.

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Chapter 8 - Special Topics

- Performance measurement
 - Evaluation forms can be filled out either when the employee is up for evaluation or after the project is completed.
 - If it is to be filled out when the employee is eligible for promotion or a merit increase, then the project manager should be willing to give an honest appraisal of the employee's performance

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	TIMELINESS	IS FASTER THAN A SPEEDING BULLET	IS AS FAST AS A SPEEDING BULLET	NOT QUITE AS FAST AS A SPEEDING BULLET	WOULD YOU BELIEVE A SLOW BULLET?	WOUNDS HIMSELF WITH THE BULLET
e	INITIATIVE	IS STRONGER THAN A LOCOMOTIVE	IS STRONGER THAN A BULL ELEPHANT	IS STRONGER THAN A BULL	SHOOTS THE BULL	SMELLS LIKE A BULL
?,	ADAPTABILITY	WALKS ON WATER CONSISTENTLY	WALKS ON WATER IN EMERGENCIES	WASHES WITH WATER	DRINKS WATER	PASSES WATER IN EMERGENCIES
9ni	COMMUNICATIONS	TALKS WITH GOD	TALKS WITH ANGELS	TALKS TO HIMSELF	ARGUES WITH HIMSELF	LOSES THE ARGUMENT WITH HIMSELF

Chapter 8 - Special Topics - Performance measurement

EMPLOYEE'S NAME			DATE	
PROJECT TITLE			JOB NUMBER	
EMPLOYEE ASSIGNME	ENT			
EMPLOYEE'S TOTAL T	IME TO DATE ON PROJEC	Г	EMPLOYEE'S REMAINING	TIME ON PROJECT
TECHNICAL JUDGMENT:				
Quickly reaches sound conclusions	Usually makes sound conclusions	☐ Marginal decision- making ability	Needs technical assistance	Makes faulty conclusions
WORK PLANNING:				
Good planner	Plans well with help	Occasionally plans well	☐ Needs detailed instructions	Cannot plan at all
COMMUNICATIONS:				
Always understands instructions	Sometimes needs clarification	Always needs clarifications	☐ Needs follow-up	☐ Needs constant instruction
ATTITUDE:				
Always job interested	Shows interest most of the time	Shows no job interest	☐ More interested in other activities	Does not care about job
COOPERATION:				
Always enthusiastic	Works well until job is completed	Usually works well with others	☐ Works poorly with others	Wants it done his/her way
WORK HABITS:				
Always project oriented	☐ Most often project oriented	Usually consistent with requests	☐ Works poorly with others	Always works alone
ADDITIONAL COMMENTS	0.			

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Chapter 8 - Special Topics Performance measurement

EMPLOYEE'S N.	AME				DAT	E	
PROJECT TITLE					JOE	NUME	BER
EMPLOYEE ASS	SIGNMENT						
EMPLOYEE'S TO	OTAL TIME TO DATE ON PROJECT				EMF	PLOYE	E'S REMAINING TIME ON PROJEC
		EXCELLENT	ABOVE AVERAGE	AVERAGE	BELOW AVERAGE	INADEQUATE	
	TECHNICAL JUDGMENT						
	WORK PLANNING						
	COMMUNICATIONS						1
	ATTITUDE						
	COOPERATION						1
	WORK HABITS						8.8
	PROFIT CONTRIBUTION						1

Chapter 8 - Special Topics

• Performance measurement

1.	NAME				2. DATE O	F EVALUA	TION		
3.	JOB ASSI	GNMENT_			4. DATE C	F LAST E	VALUATION		
5.	PAY GRA	DE							
6.	EMPLOYE	E'S IMMED	IATE SUPER	RVISOR					
7.	SUPERVI	SOR'S LEVI	EL: SEC	CTION	DEPT.	DIVISION	N EXE	CUTIVE	
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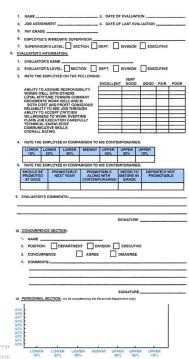
- Performance measurement
 - Obviously, evaluation forms have severe limitations, as a one-to-one comparison of all project functional personnel is of little value if the employees are from different departments.
 - Several companies are using this form by assigning coefficients of importance to each topic.
 - For example, under a topic of technical judgment, the project engineer might have a coefficient of importance of 0.90, whereas the cost accountant's coefficient might be 0.25.
 - These coefficients could be reversed for a topic on cost consciousness. Unfortunately, such comparisons have questionable validity, and this type of evaluation form is usually of a confidential nature.

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Chapter 8 - Special Topics

- Performance measurement
 - From a top-management perspective, the indirect evaluation process brings with it several headaches.
 - Wage and salary administrators readily accept the necessity for using different evaluation forms for whitecollar and blue-collar workers.
 - But now, we have a situation in which there can be more than one type of evaluation system for whitecollar workers alone.
 - Those employees who work in project-driven functional departments will be evaluated directly and indirectly, but based on formal procedures.
 - Employees who charge their time to overhead accounts and non-project-driven departments might simply be evaluated by a single, direct evaluation procedure.

- Performance measurement
 - Many wage and salary administrators contend that they cannot live with a whitecollar evaluation system and therefore have tried to combine the direct and indirect evaluation forms into one



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			SIGNATURE _	
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POSITION:				
POSITION:		AGREE	DISAGREE	
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CONCURRE	ENCE	:	-	
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Chapter 8 - Special Topics

Performance measurement

- Financial compensation and rewards
 - Proper financial compensation and rewards are important to the morale and motivation of people in any organization.
 - Job classification and job descriptions
 - Dual accountability and dual reporting relationships
 - Bases for financial rewards
 - Special compensations

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Chapter 8 - Special Topics

- Financial compensation and rewards
 - Some specific guidelines are provided here to help managers establish compensation systems for their project organizations.
 - *The foundations of these compensation practices are based on four systems:*
 - (1) job classification,
 - **(2)** *base pay,*
 - (3) performance appraisals, and
 - (4) merit increases.

- Financial compensation and rewards
 - Job Classifications and Job Descriptions
 - The first step is to define job titles for various project personnel and their corresponding responsibilities.
 - Titles are noteworthy because they imply certain responsibilities, position power, organizational status, and pay level. Furthermore, titles may indicate certain functional responsibilities
 - The job description provides the basic charter for the job and the individual in charge of it.
 - A good job description is brief and concise, not exceeding one page. Typically, it is broken down into three sections:
 - (1) overall responsibilities,
 - (2) specific duties, and
 - (3) qualifications.

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Job Description: Lead Project Engineer of Processor Development

Overall Responsibility

Responsible for directing the technical development of the new Central Processor including managing the technical personnel assigned to this development. The Lead Project Engineer has dual responsibility, (1) to his/her functional superior for the technical implementation and engineering quality and (2) to the project manager for managing the development within the established budget and schedule.

Specific Duties and Responsibilities

- Provide necessary program direction for planning, organizing, developing and integrating the engineering effort, including establishing the specific objectives, schedules, and budgets for the processor subsystem.
- 2. Provide technical leadership for analyzing and establishing requirements, preliminary designing, designing, prototyping, and testing of the processor subsystem.
- 3. Divide the work into discrete and clearly definable tasks. Assign tasks to technical personnel within the Lead Engineer's area of responsibility and other organizational units.
- 4. Define, negotiate, and allocate budgets and schedules according to the specific tasks and overall program requirements
- 5. Measure and control cost, schedule, and technical performance against program plan.
- 6. Report deviations from program plan to program office.
- 7. Replan trade-off and redirect the development effort in case of contingencies such as to best utilize the available resources toward the overall program objectives.
- 8. Plan, maintain, and utilize engineering facilities to meet the long-range program requirements.

Qualifications

- 1. Strong technical background in state-of-the-art central processor development.
- 2. Prior task management experience with proven record for effective cost and schedule control of multidisciplinary technology-based task in excess of SIM.
- 3. Personal skills to lead, direct, and motivate senior engineering personnel.
- 4. Excellent communication skills, both orally and in writing.



- Financial compensation and rewards
 - Base-Pay Classifications and Incentives
 - After the job descriptions have been developed, one can delineate pay classes consistent with the responsibilities and accountabilities for business results.
 - This is understandable because, on the surface, project positions look less senior than their functional counterparts, as formal authority over resources and direct reports are often less necessary for project positions than for traditional functional positions.
 - Many companies that have struggled with this problem have solved it by
 - (1) working out compensation schemes as a team of senior managers and personnel specialists, and
 - (2) applying criteria of responsibility and business/profit accountability to setting pay scales for project personnel in accord with other jobs in their organization.

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Chapter 8 - Special Topics

- Financial compensation and rewards
 - Performance Appraisals
 Traditionally, the purpose of the performance appraisal is to:
 - Assess the employee's work performance, preferably against pre-established objectives
 - Provide a justification for salary actions
 - Establish new goals and objectives for the next review period
 - Identify and deal with work-related problems
 - Serve as a basis for career discussions

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- Financial compensation and rewards
 - Performance Appraisals
 - Acknowledging the realities, organizations are measuring performance of their project managers, in at least two areas:
 - Business results as measured by profits, contribution margin, return on investment, new business, and income; also, on-time delivery, meeting contractual requirements, and within-budget performance.

This applies only if the project manager is indeed responsible for business results such as contractual performance or new business acquisitions.

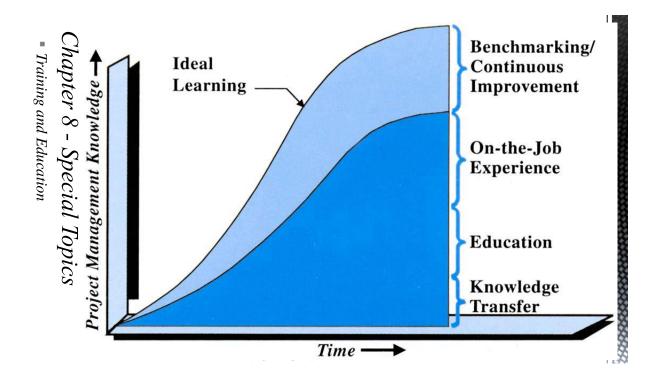
 Managerial performance as measured by overall project management effectiveness, organization, direction and leadership, and team performance

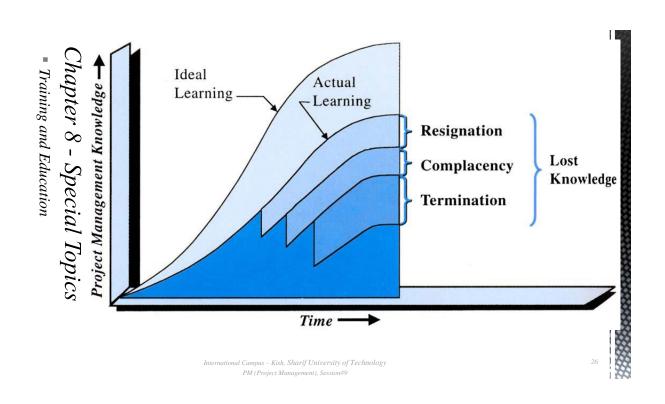
This is clearly more difficult to assess. Moreover, if handled improperly, it will lead to manipulation and game playing.

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Chapter 8 - Special Topics

- Training and Education
 - Given that most companies use the same basic tools as part of their methodology, what makes one company better than another?
 - *The answer lies in the execution of the methodology.*
 - Training and education can accelerate not only the project management maturity process but also the ability to execute the methodology.





Training and Education

- Companies often find themselves in a position of having to provide a key initiative for a multitude of people, or simply specialized training to a program team about to embark upon a new long-term effort.
- The elements common to training on a key initiative or practice include:
 - A front-end analysis of the program team's needs and training requirements
 - Involvement of the program teams in key decisions
 - Customized training to meet program team's specific needs
 - Targeted training for the implementation of specific practices
 - Improved training outcomes, including better course depth, timeliness, and reach

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Chapter 9: The Variables for Success

■ Introduction

- Project management cannot succeed unless the project manager is willing to employ the systems approach to project management by analyzing those variables that lead to success and failure.
 - Predicting project success
 - Project management effectiveness
 - Expectations
 - Force field analysis

Chapter 9: The Variables for Success

- Predicting the project success
 - One of the most difficult tasks is predicting whether the project will be successful.
 - Project success is often measured by the "actions" of three groups:
 - The project manager and team,
 - The parent organization, and
 - The customer's organization.

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Chapter 9: The Variables for Success

- Predicting the project success
 - There are certain actions that the project manager and team can take in order to stimulate project success. These actions include:
 - Insist on the right to select key project team members.
 - Select key team members with proven track records in their fields.
 - Develop commitment and a sense of mission from the outset.
 - Seek sufficient authority and a projectized organizational form.
 - Coordinate and maintain a good relationship with the client, parent, and team.
 - Seek to enhance the public's image of the project.
 - Have key team members assist in decision-making and problem-solving.
 - ·

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Chapter 9: The Variables for Success

- Predicting the project success
 - With regard to the parent organization, there exist a number of variables that can be used to evaluate parent organization support. These variables include:
 - A willingness to coordinate efforts
 - A willingness to maintain structural flexibility
 - A willingness to adapt to change
 - Effective strategic planning
 - Rapport maintenance
 - Proper emphasis on past experience
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Chapter 9: The Variables for Success

- Project management effectiveness
 - Project managers interact continually with upper-level management, perhaps more so than with functional managers.
 - Not only the success of the project, but even the career path of the project manager can depend on the working relationships and expectations established with upper-level management.
 - There are four key variables in measuring the effectiveness of dealing with upper-level management. These variables are
 - Credibility,
 - Priority,
 - Accessibility, and
 - Visibility

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