PM
(Project Management)

International Campus – Kish
Sharif University of Technology

Session# 4

Course Description

- *Instructor*
  - *Omid Fatahi Valilai, Ph.D. Industrial Engineering Department, Sharif University of Technology*
  - *Email: Omidf@ie.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*
- *Course evaluation*
  - *Mid-term   (30%)*
  - *Final exam   (40%)*
  - *Quiz   (10%)*
 - *Exercise   (20%)*

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.*
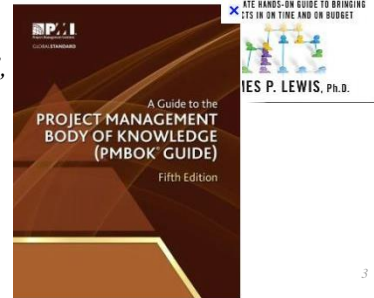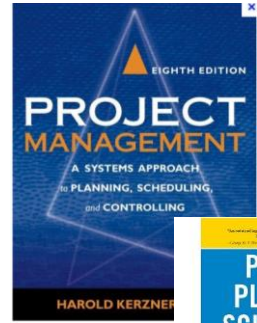
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Course Description *(Continued...)*

- *Course Calendar:*

		Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu		
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9	Sep	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	Oct	10
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10	Oct	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Nov	11
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11	Nov	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Dec	12
		Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo		
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12	Dec	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Jan	1
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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*

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*

Chapter 2 - Project Management Growth—Concepts and Definitions

- *Project management: 1945–1960*
  - *During the 1940s, line managers used the concept of over-the-fence management to manage projects.*

  - *Projects in the aerospace and defense industries were having cost overruns in excess of 200 to 300%.*
    - *Blame was erroneously placed upon improper implementation of project management when, in fact, the real problem was the inability to forecast technology.*

  - *By the late 1950s and early 1960s, the aerospace and defense industries were using project management on virtually all projects*

Chapter 2 - Project Management Growth—Concepts and Definitions

- *Project management: 1960–1985*
  - *Between the middle and late 1960s, more executives began searching for new management techniques and organizational structures that could be quickly adapted to a changing environment*

  - *Project management restructuring has permitted companies to:*
    - *Accomplish tasks that could not be effectively handled by the traditional structure*
    - *Accomplish onetime activities with minimum disruption of routine business*

Chapter 2 - Project Management Growth—Concepts and Definitions
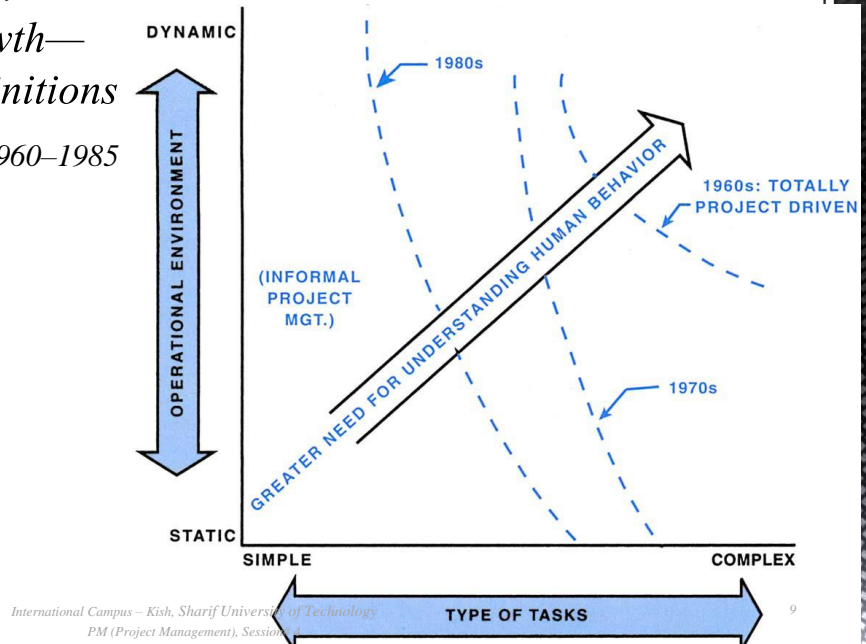
▪ *Project management: 1960–1985*
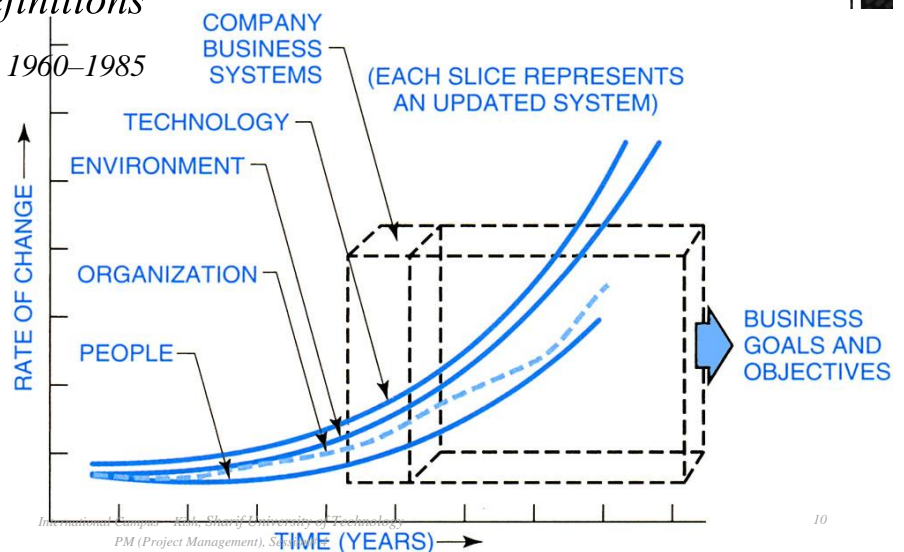
Chapter 2 - Project Management Growth—Concepts and Definitions

▪ *Project management: 1960–1985*

Chapter 2 - Project Management Growth—Concepts and Definitions
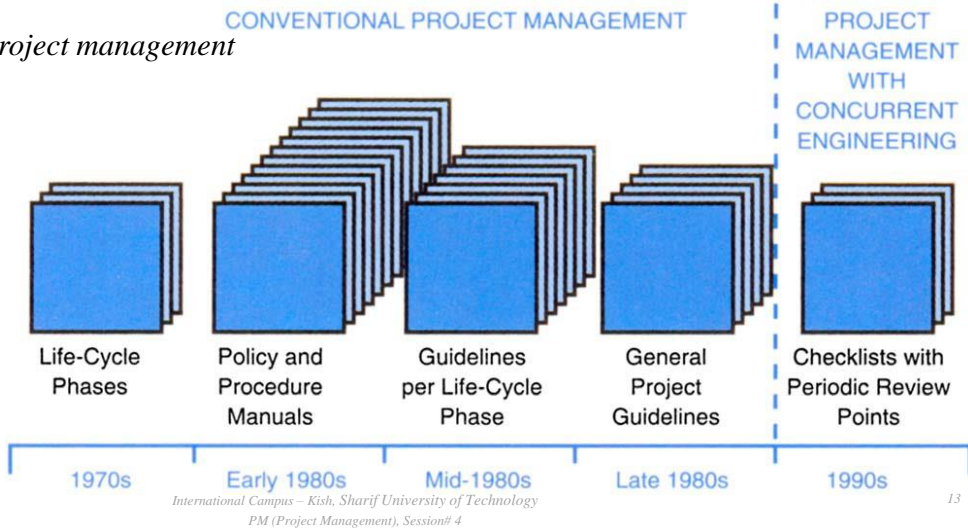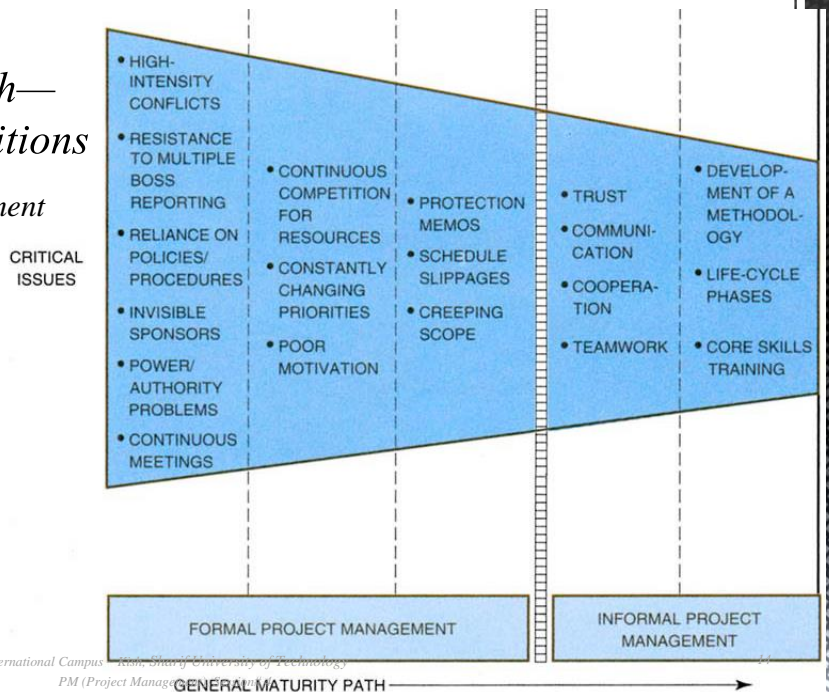
- *Project manager & Product manager*
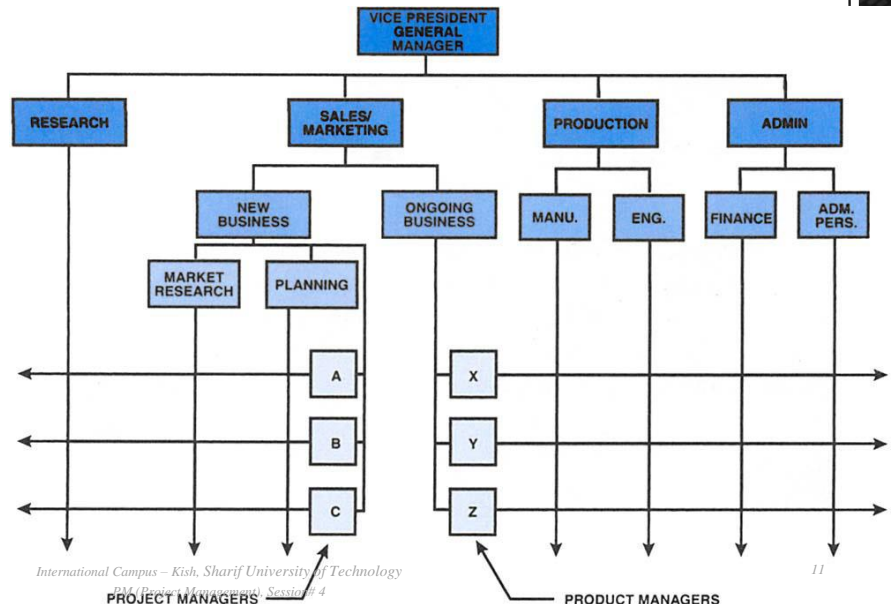
Chapter 2 - Project Management Growth—Concepts and Definitions

- *Informal project management*
- *Companies today are managing projects more informally than before.*
  - *Informal project management does have some degree of formality but emphasizes managing the project with a minimum amount of paperwork.*
  - *Informal project management is based upon guidelines rather than the policies and procedures that are the basis for formal project management.*

- *Informal project management mandates:*

  - *Effective communications*
  - *Effective cooperation*
  - *Effective teamwork*
  - *Trust*

Chapter 2 - Project Management Growth—Concepts and Definitions

▪ *Informal project management*

Chapter 2 - Project Management Growth— Concepts and Definitions

▪ *Informal project management*

Chapter 2 - Project Management Growth—Concepts and Definitions

▪ *The many faces of success*

Primary	Secondary
•Within time	•Follow-on work from this customer
•Within cost	•Using the customer's name as a reference on your literature
•Within quality limits	•With minimum or mutually agreed upon scope changes
•Accepted by the customer	•Without disturbing the main flow of work
	•Without changing the corporate culture
	•Without violating safety requirements
	•Providing efficiency and effectiveness of operations
	•Satisfying OSHA/EPA requirements
	•Maintaining ethical conduct
	•Providing a strategic alignment
	•Maintaining a corporate reputation
	•Maintaining regulatory agency relations

Chapter 2 - Project Management Growth—Concepts and Definitions

▪ *The many faces of failure*

  ▪ *The true definition of failure is when the final results are not what were expected, even though the original expectations may or may not have been reasonable*

  ▪ *With unmeet-able expectations, failure is virtually assured since we have defined failure as unmet expectations. This is called a planning failure and is the difference between what was planned and what was, in fact, achieved.*

  ▪ *The second component of failure is poor performance or actual failure. This is the difference between what was achievable and what was actually accomplished.*

  ▪ *Perceived failure is the net sum of actual failure and planning failure*

Chapter 2 - Project Management Growth—Concepts and Definitions
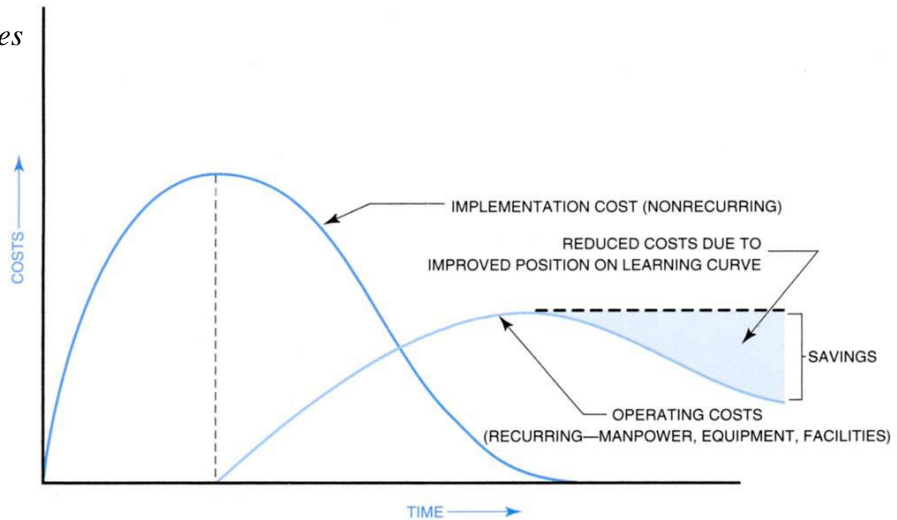
▪ *The many faces of failure*
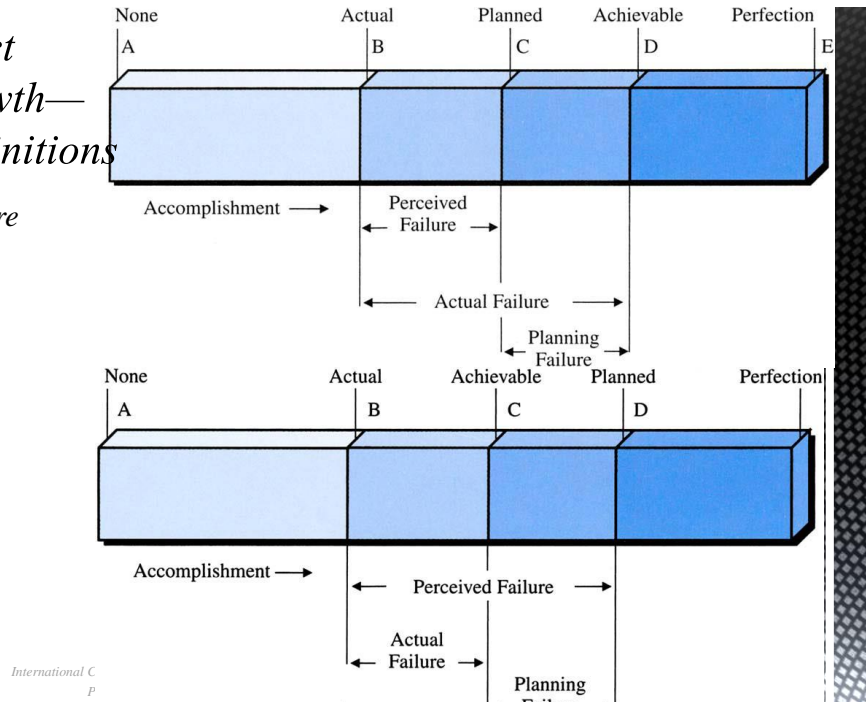
Chapter 2 - Project Management Growth—Concepts and Definitions

▪ *Project life cycles*
  ▪ *Every program, project, or product has certain phases of development known as life-cycle phases*

▪ *The theoretical definitions of the life-cycle phases of a system can be applied to a project. These phases include:*
  ▪ *Conceptual*

  ▪ *Planning*

  ▪ *Testing*

  ▪ *Implementation*

  ▪ *Closure*

Chapter 2 - Project Management Growth—Concepts and Definitions

- *Project life cycles*

IMPLEMENTATION COST (NONRECURRING)

REDUCED COSTS DUE TO IMPROVED POSITION ON LEARNING CURVE

SAVINGS

OPERATING COSTS (RECURRING—MANPOWER, EQUIPMENT, FACILITIES)
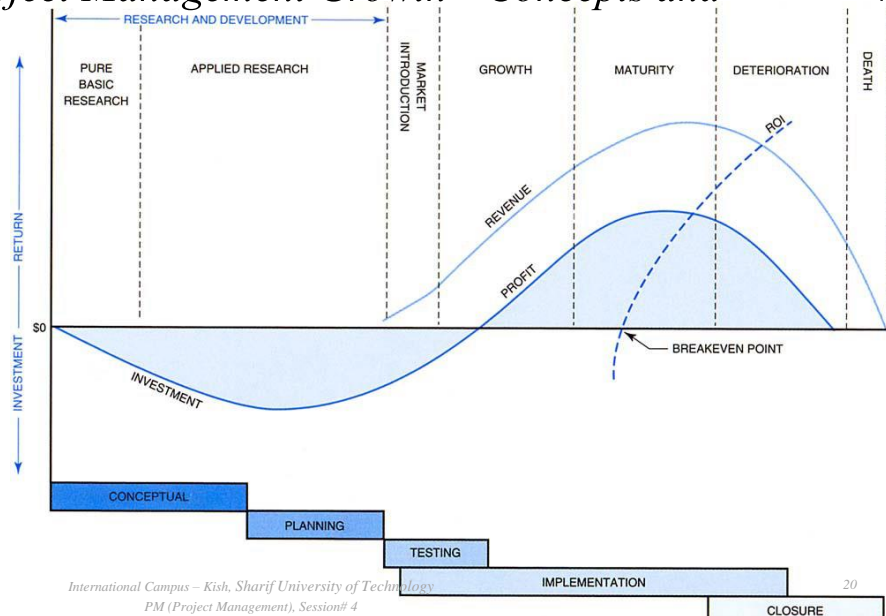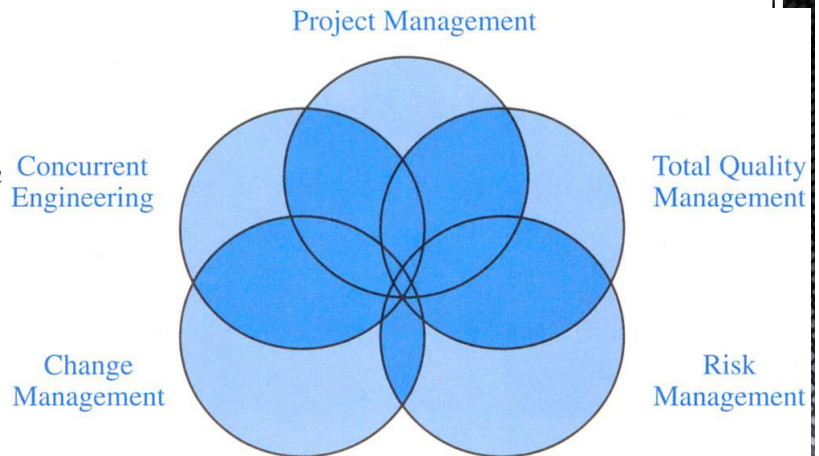
COSTS

TIME

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Chapter 2 - Project Management Growth—Concepts and Definitions

- *Project life cycles*

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Chapter 2 - Project Management Growth—Concepts and Definitions

- *Project management methodologies*
- *Achieving project management excellence, or maturity, is more likely with a repetitive process that can be used on each and every project.*

Chapter 2 - Project Management Growth—Concepts and Definitions

- *During the 1990s, the following processes were integrated into a single methodology:*

  - *Project Management: The basic principles of planning, scheduling, and controlling work*
  - *Total Quality Management: The process of ensuring that the end result will meet the quality expectations of the customer*
  - *Concurrent Engineering: The process of performing work in parallel rather than series in order to compress the schedule without incurring serious risks*
  - *Scope Change Control: The process of controlling the configuration of the end result such that value added is provided to the customer*
  - *Risk Management: The process of identifying, quantifying, and responding to the risks of the project without any material impact on the project's objectives*