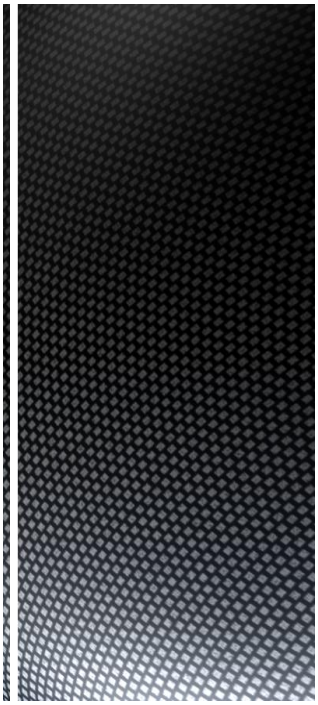
MIS
(Management Information System)
(21-972)

Department of Industrial Engineering
Sharif University of Technology

Session #6

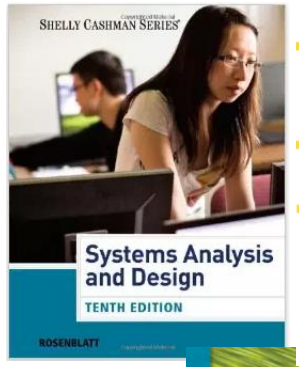


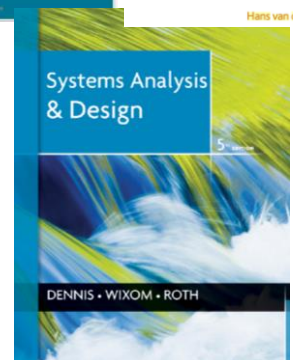
Course Description

- *Instructor*
  - *Omid Fatahi Valilai, Ph.D. Industrial Engineering Department, Sharif University of Technology*
  - *Email: Fvalilai@sharif.edu , Tel: 021-6616-5706*
  - *Website: http://sharif.edu/~fvalilai*
- *Class time*
  - *Saturday-Monday* *10:30~12:00*
- *Course evaluation*
  - *Mid-term* *(20%)*
  - *Final exam* *(20%)*
  - *Quiz* *(10%)*
  - *Exercise-Projects* *(30%)*

Course Description *(Continued …)*

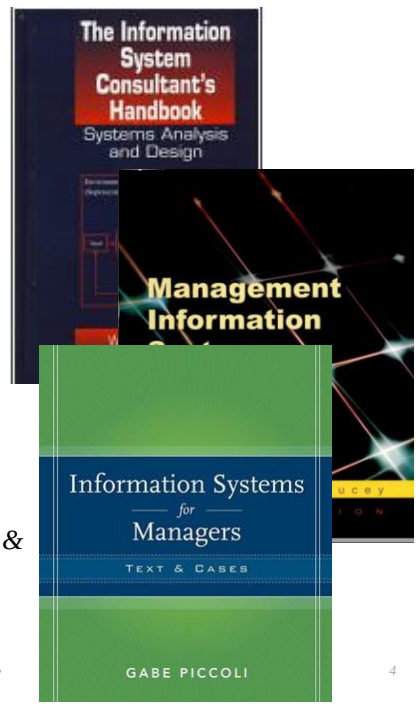
- *Mid-term session:*
  - *Saturday, 7th, Azar 1394*
- *Final session:*
  - *Monday, 28th, Dey 1394*
- *Reference:*
  - *Rosenbalt, "System Analysis and Design", 10th edition, 2013, Course Technology*
  - *Dennis, Lan; "Systems Analysis and Design", 2012, Wiley; 5th edition*
  - *Johannes Govardus Maria van der Heijde; "Designing Management Information Systems", 2009, OXFORD university press*





Course Description *(Continued …)*

- *Reference:*
  - *William S. Davis, David C. Yen, "The information system consultant's handbook: system analysis and design", 2010, Taylor and Francis*
  - *Terence Lucey; "Management Information Systems", 2004, Cengage Learning EMEA*
  - *Gabriele Piccoli; "Information systems for managers: texts & cases ", 2007, John Wiley & Sons Inc*



Course Description *(Continued..)*

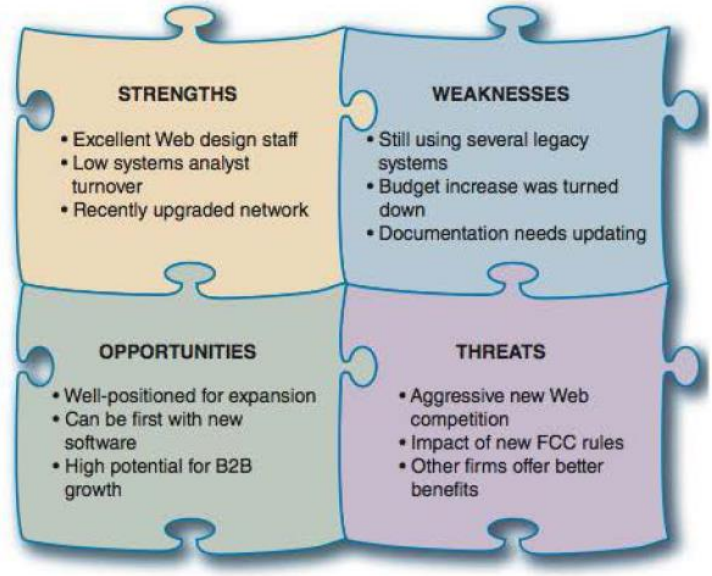
- *Contents:*
  - *Introduction to Systems Analysis and Design*
  - *Analyzing the Business Case*
  - *Managing Systems Projects*
  - *Requirements Modeling*
  - *Data and Process Modeling*
  - *Object Modeling*
  - *Development Strategies*
  - *User Interface Design*
  - *Data Design*
  - *System Architecture*
  - *Managing Systems Implementation*

Course Description *(Continued..)*

- *Contents:*
  - *Analyzing the Business Case*
    - *A Framework for IT Systems Development*
    - *What Is a Business Case?*
    - *Information Systems Projects*
    - *Evaluation of Systems Requests*
    - *Overview of Feasibility*
    - *Preliminary Investigation Overview*

Analyzing the Business Case

- *Contents:*
  - *A Framework for IT Systems Development*
    - *SWOT Analysis*



Analyzing the Business Case

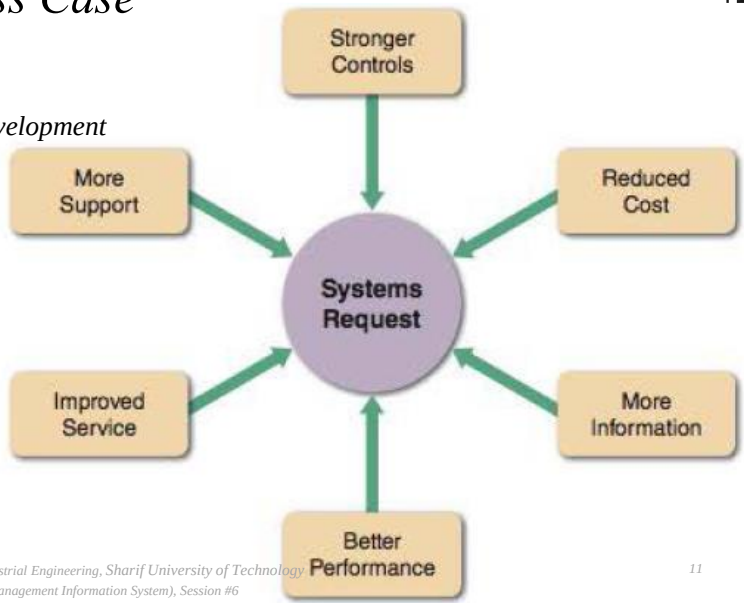
- *Contents:*
  - *A Framework for IT Systems Development*
    - *What is a business case?*
    - *The term business case refers to the reasons, or justification, for a proposal.*
    - *A business case should be comprehensive, yet easy to understand and should describe the project clearly, provide the justification to proceed, and estimate the project's financial impact.*

Analyzing the Business Case

- *Contents:*
  - *A Framework for IT Systems Development*
    - *What is a business case?*
      - *Why are we doing this project?*
      - *What is the project about?*
      - *How does this solution address key business issues?*
      - *How much will it cost and how long will it take?*
      - *Will we suffer a productivity loss during the transition?*
      - *What is the return on investment and payback period?*
      - *What are the risks of doing the project? What are the risks of not doing the project?*
      - *How will we measure success?*
      - *What alternatives exist?*

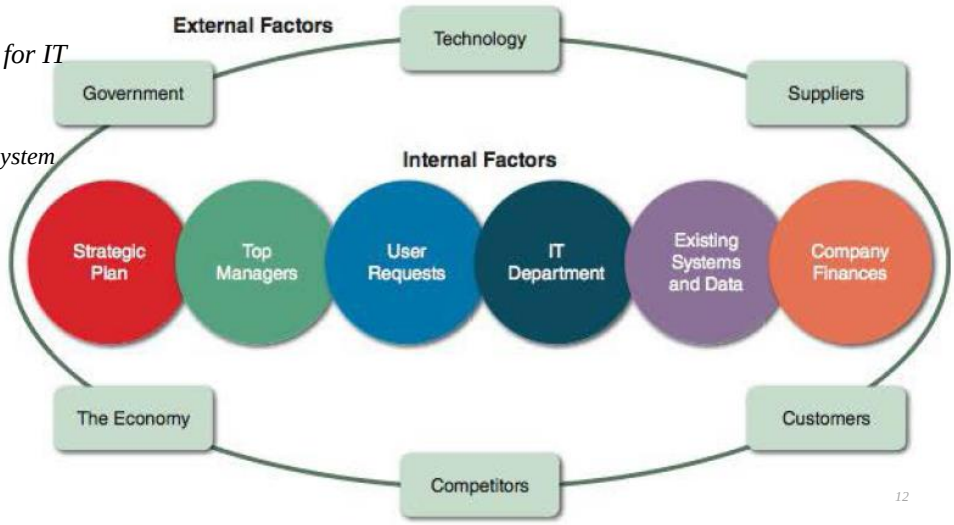
Analyzing the Business Case

- *Contents:*
  - *A Framework for IT Systems Development*
    - *Information system projects*



Analyzing the Business Case

- *Contents:*
  - *A Framework for IT Systems Development*
    - *Information system projects*



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Analyzing the Business Case

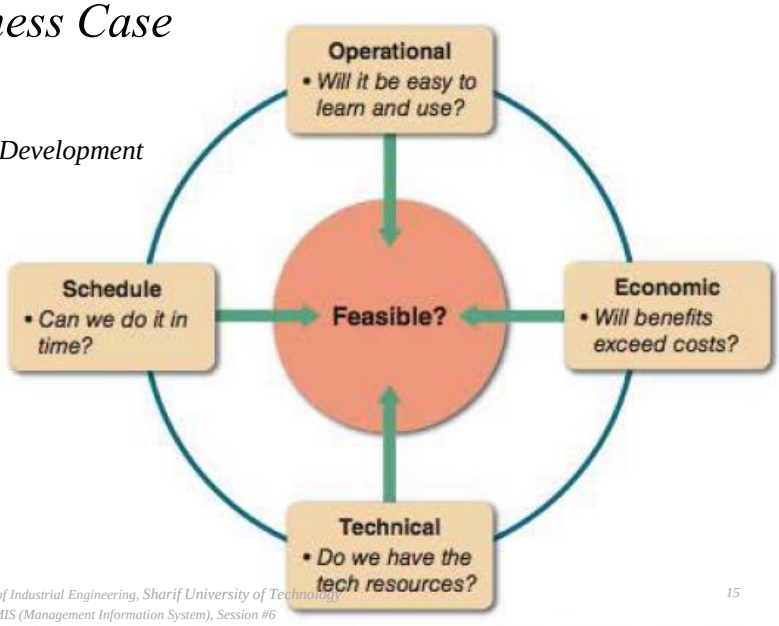
- *Contents:*
  - *A Framework for IT Systems Development*
    - *Evaluation of Systems Requests*
    - *In most organizations, the IT department receives more systems requests than it can handle.*
    - *Many organizations assign responsibility for evaluating systems requests to a group of key managers and users.*
    - *Many companies call this group a systems review committee or a computer resources committee.*
    - *The objective is to use the combined judgment and experience of several managers to evaluate systems projects.*

Analyzing the Business Case

- *Contents:*
  - *A Framework for IT Systems Development*
    - *Evaluation of Systems Requests*
    - *When a systems request form is received, a systems analyst or IT manager examines it to determine what IT resources are required for the preliminary investigation.*
    - *A designated person or a committee then decides whether to proceed with a preliminary investigation.*
    - *Most large companies use a systems review committee to evaluate systems requests.*
    - *A typical committee consists of the IT director and several managers from other departments.*
    - *The IT director usually serves as a technical consultant to ensure that committee members are aware of crucial issues, problems, and opportunities.*

Analyzing the Business Case

- *Contents:*
  - *A Framework for IT Systems Development*
    - *Overview of feasibility*



Analyzing the Business Case

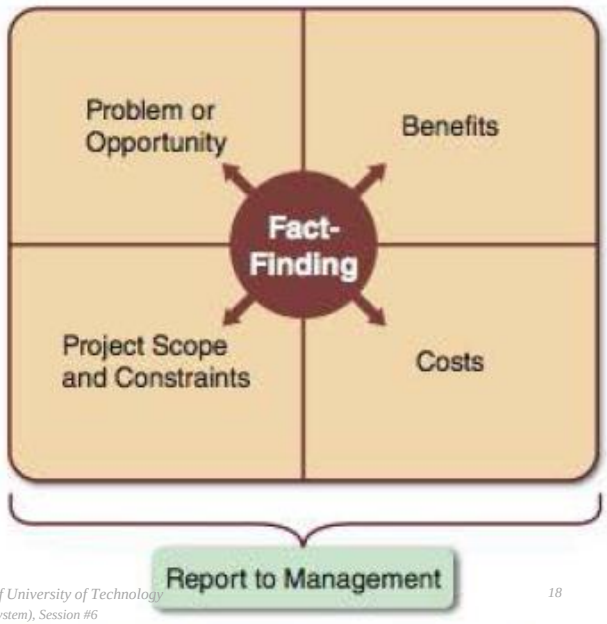
- *Contents:*
  - *A Framework for IT Systems Development*
    - *Overview of feasibility*
    - *Economic feasibility means that the projected benefits of the proposed system out-weigh the estimated costs usually considered the total cost of ownership (TCO), which includes ongoing support and maintenance costs, as well as acquisition costs.*
      - *People, including IT staff and users*
      - *Hardware and equipment*
      - *Software, including in-house development as well as purchases from vendors*
      - *Formal and informal train ing, including peer-to-peer support*
      - *Licenses and fees*
      - *Consulting expenses*
      - *Facility costs*
      - *The estimated cost of not developing the system or postponing the project*

Analyzing the Business Case

- *Contents:*
  - *A Framework for IT Systems Development*
    - *Preliminary investigation*
    - *A systems analyst conducts a preliminary investigation to study the systems request and recommend specific action.*
    - *After obtaining an authorization to proceed, the analyst interacts with managers and users*
    - *The analyst gathers facts about the problem or opportunity, project scope and constraints, project benefits, and estimated development time and costs.*
    - *The end product of the preliminary investigation is a report to management*

Analyzing the Business Case

- *Contents:*
  - *A Framework for IT Systems Development*
    - *Preliminary investigation*



Analyzing the Business Case

- *Contents:*
  - *A Framework for IT Systems Development*
    - *Preliminary investigation*
      - *Understand the problem or opportunity*
      - *Define the project scope and constraints*
      - *Perform fact-finding*
        - *Analyze organization charts*
        - *Review documentation*
        - *Observe operations*
        - *Conduct a user survey*
      - *Study usability, cost, benefit, and schedule data*

Analyzing the Business Case

- *Contents:*
  - *A Framework for IT Systems Development*
    - *Preliminary investigation*
      - *Evaluate feasibility*
        - *Operational*
        - *Technical*
        - *Economic*
      - *Present recommendations to management*