

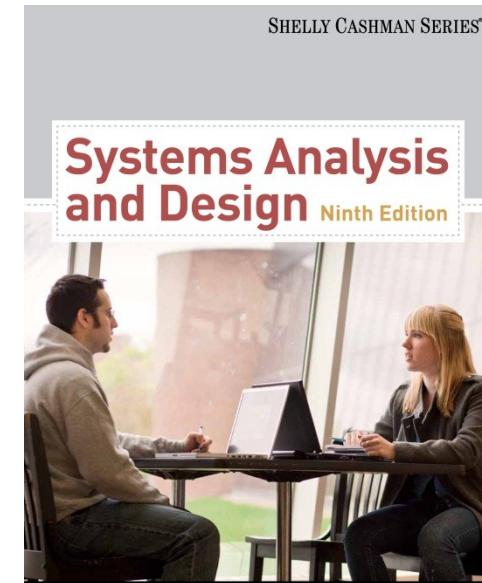
# Systems Analysis and Design

## 9th Edition

Chapter 2 ( in part )

Analyzing the Business Case

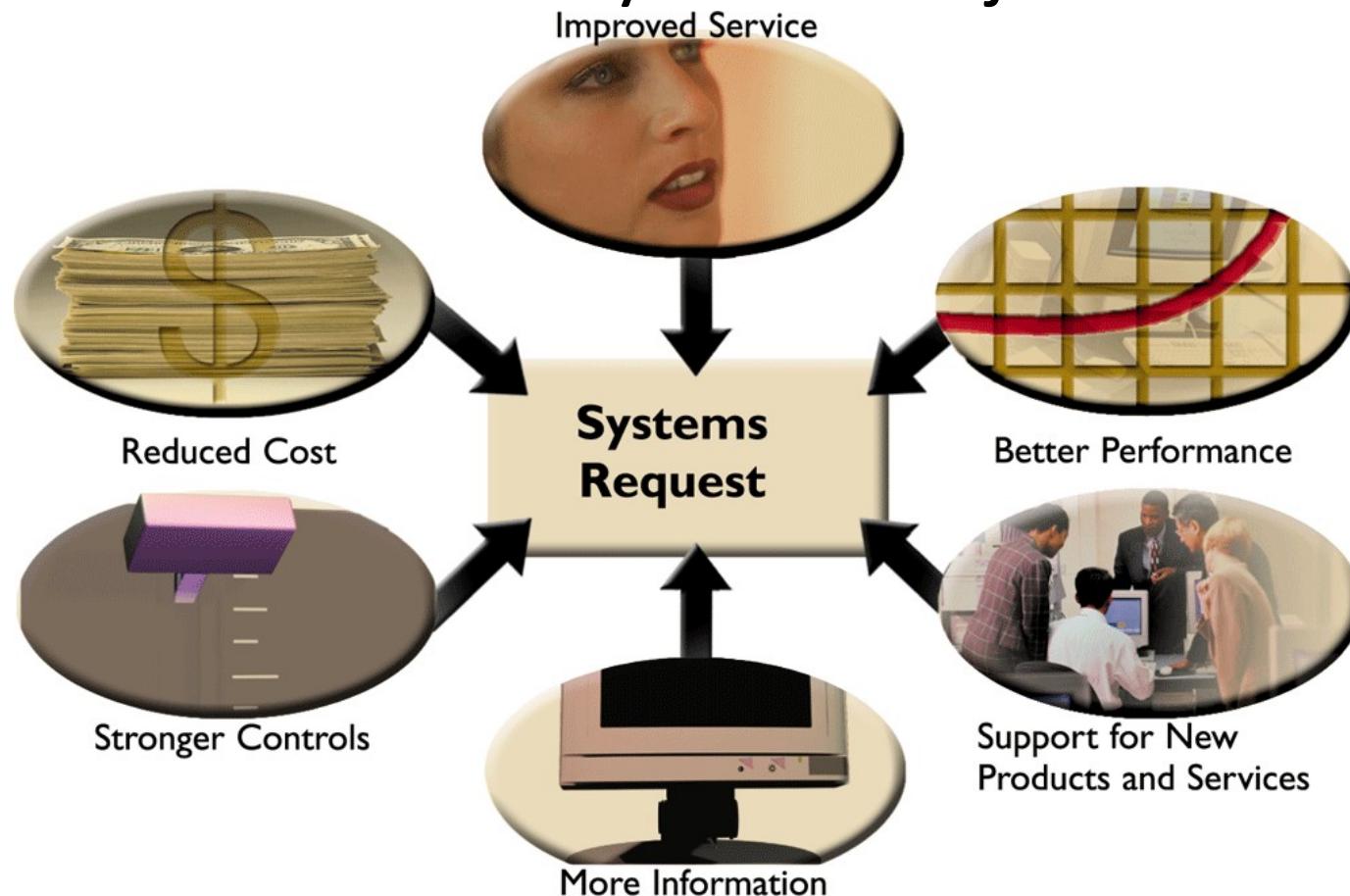
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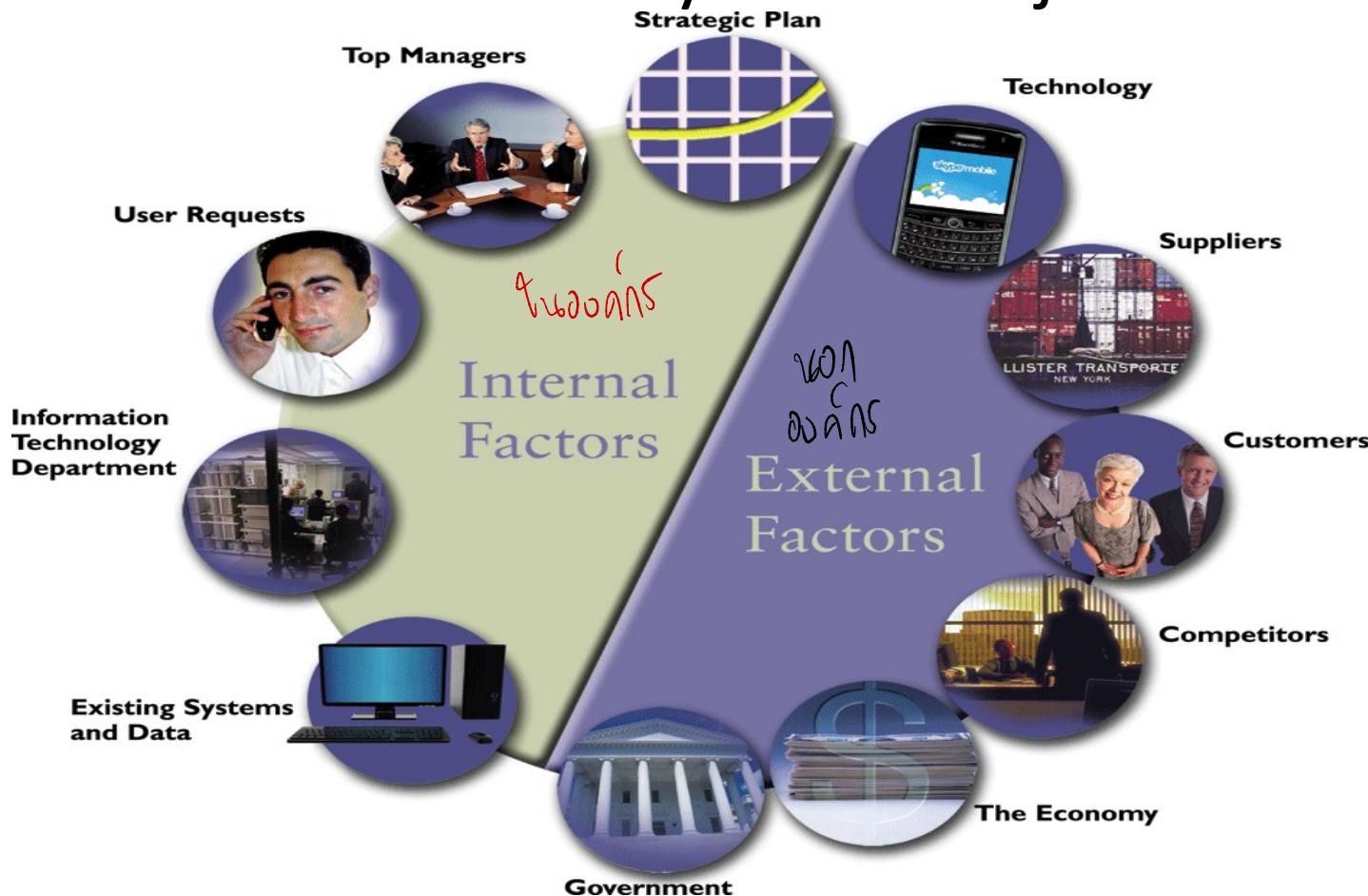
# Information Systems Projects

- Main Reasons for Systems Projects



# Information Systems Projects

- Factors that Affect Systems Projects



# Information Systems Projects

- Project Management
  - If the project is approved, it can be planned, scheduled, monitored and controlled, and reported upon
  - Individual analysts or IT staff members often handle small projects, but companies usually designate a project manager to coordinate the overall effort for complex projects

ការវិភាគនៃតម្លៃសម្រាប់

# Evaluation of Systems Requests

- Systems review committee or a computer resources committee evaluate systems requests
- Systems Requests Forms ( ព័ត៌មាន គេហទ័រ )
  - A properly designed form streamlines the request process and ensures consistency
  - Occasionally a situation will arise that requires an immediate response

ការចំណាំនៃតម្លៃសម្រាប់ការបង្កើតនៃតម្លៃ

# Evaluation of Systems Requests

- Systems Review Committees *អ្នកវិភាគប្រព័ន្ធសាត្រី*
  - Most large companies use a systems review committee to evaluate systems requests
  - Many smaller companies rely on one person to evaluate systems requests instead of a committee
  - The goal is to evaluate the requests and set priorities *(ស្មារច្បាប់លទ្ធផលទទួល)*

# Overview of Feasibility

- A systems request must pass several tests, called a feasibility study, to see whether it is worthwhile to proceed further
- Operational Feasibility
  - Depends on several vital issues



# Overview of Feasibility

Yes

- Technical Feasibility

Yes

- Economic Feasibility

- Total cost of ownership (TCO)

- Tangible benefits

- Intangible benefits

Yes

- Schedule Feasibility

សារីមាន កំណត់អាជីវកម្ម

តិច ពាក្យលេខា

ទំនុយ  
គម្រោង / ការបង់បាត់  
អាមេរិក / ក្រសួង  
អ.សាម នក ចាត់

សារីមាន កំណត់អាជីវកម្ម

១. ដឹងពីរបាយការណ៍  
២. នៅពីរបាយការណ៍

# Evaluating Feasibility

ស្ថាបី

ការវិភាគមុនពេលអនុវត្ត  
របស់ទូទៅ

- The first step in evaluating feasibility is to identify and weed out systems requests that are not feasible
- Even if the request is feasible, it might not be necessary
- Feasibility analysis is an ongoing task that must be performed throughout the systems development process

សំណង់ទៅលើ

# Setting Priorities

- Factors that Affect Priority

តើម្នាស់?

- Will the proposed system reduce costs? Where?  
When? How? How much?
- Will the system increase revenue for the  
company? Where? When? How? How much?

តើអាមេរិកបានកុំពូនសំណង់ទៅលើ? / តើវាបានកុំពូនសំណង់ទៅលើ?

# Setting Priorities

ກົດໝາຍ

- Factors that Affect Priority
  - Will the systems project result in more information or produce better results? How? Are the results measurable? ກົດໝາຍ ວິທີ
  - Will the system serve customers better? ກົດໝາຍ ອົງການ
  - Will the system serve the organization better?

# Setting Priorities

ຕົວອາຄານ

ກວມ

ກິລາດຸມ

ບໍລິນ

- Factors that Affect Priority

- Can the project be implemented in a reasonable time period? How long will the results last? ຕົວທີ່ຈະໄດ້ຮັບຜົນ
- Are the necessary financial, human, and technical resources available? ທີ່ຈະມີມູນຄົວໃຈ ແລະ ອຳນວຍ
- Whenever possible, the analyst should evaluate a proposed project based on tangible costs and benefits that represent actual (or approximate) dollar values

# Setting Priorities

វិធានសែងក្រុមអាជីវកម្ម និង ក្រុមហ៊ា

យកតំបន់សៀវភៅ  
ជាប្រព័ន្ធផ្លូវការ

- **Discretionary and Nondiscretionary Projects**
  - Projects where management has a choice in implementing them are called discretionary projects
  - Projects where no choice exists are called nondiscretionary projects



# Preliminary Investigation Overview

- Preliminary investigation
- Interaction with Managers and Users
  - Let people know about the investigation and explain your role ឬ សារព័ត៌មានលម្អិត នៃខ្លួន និងអ្នកសារព័ត៌មាន
  - Employee attitudes and reactions are important and must be considered
  - Be careful in your use of the word problem
  - Question users about additional capability they would like to have

# Preliminary Investigation Overview

- Planning the Preliminary Investigation
  - During a preliminary investigation, a systems analyst typically follows a series of steps
  - The exact procedure depends on the nature of the request, the size of the project, and the degree of urgency

# Preliminary Investigation Overview

- Step 1: Understand the Problem or Opportunity *ວິທີກົດໜານ ນອບ ເພື່ອຫຼຸດອຳນວຍ*
  - A popular technique for investigating causes and effects is called a **fishbone diagram**, or **Ishikawa diagram**

*ກົດໜານ ອະນຸຍາວັດ  
ນອບ ເພື່ອຫຼຸດ*

# Preliminary Investigation Overview

- Step 2: Define the Project Scope and Constraints
  - Project scope
  - Project creep
  - Constraint

# Preliminary Investigation Overview

- Step 2: Define the Project Scope and Constraints
  - Present versus future
  - Internal versus external
    - ~~Internal~~ ~~External~~ ~~Internal~~ ~~External~~
  - Mandatory versus desirable
  - Regardless of the type, all constraints should be identified as early as possible to avoid future problems and surprises

# Preliminary Investigation Overview

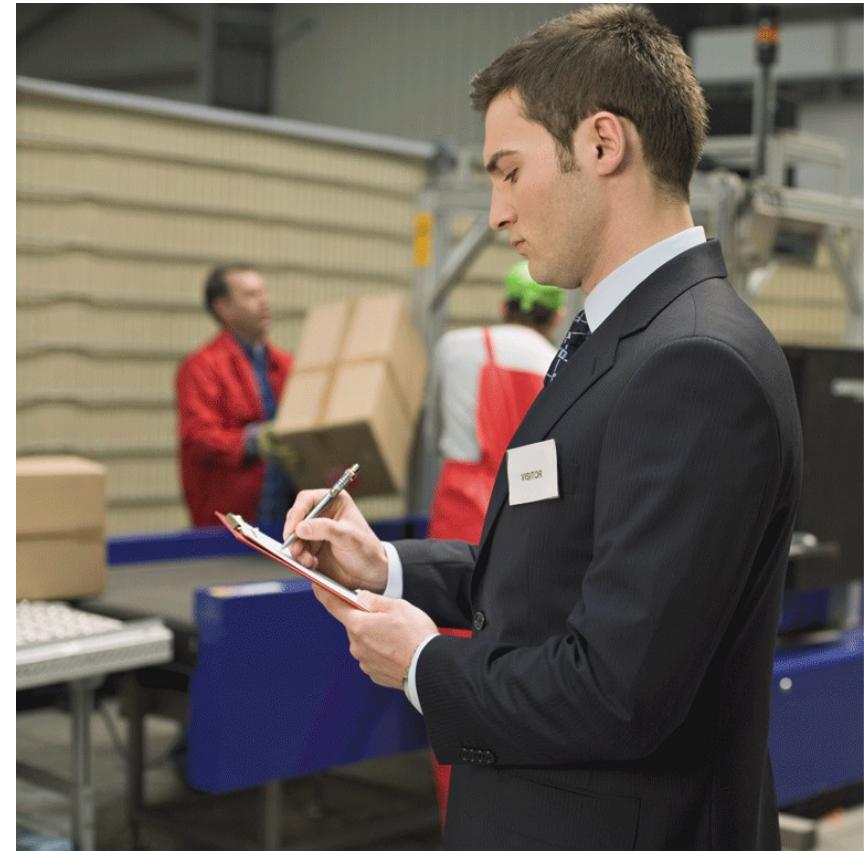
ចំណាំសារព័ត៌មានដើម្បីសងកម្មរបៀប

- Step 3: Perform Fact-Finding
  - Fact-finding involves various techniques
  - Depending on what information is needed to investigate the systems request, fact-finding might consume several hours, days, or weeks
  - Analyze Organization Charts
  - Obtain organization charts to understand how the department functions and identify individuals you might want to interview

# Preliminary Investigation Overview

- Step 3: Perform Fact-Finding

- Project  
Analysis  
Fact-finding
- Conduct interviews
  - Review documentation
  - Observe operations
  - Conduct a user survey



ឯកសារព័ត៌មាន review អនុវត្ត  
ឬ រាយការណ៍ទីផ្សារ និង ការងារ  
ឬ Interview អនុសាសនា / សាខាទីផ្សារ

ចំណាំ ឬ ការងារ

# Preliminary Investigation Overview

- Step 4: Analyze Project Usability, Cost, Benefit, and Schedule Data
  - Before you can evaluate feasibility, you must analyze this data carefully
  - What information must you obtain, and how will you gather and analyze the information?
  - What sources of information will you use, and what difficulties will you encounter in obtaining information?

# Preliminary Investigation Overview

- Step 4: Analyze Project Usability, Cost, Benefit, and Schedule Data
  - Will you conduct interviews? How many people will you interview, and how much time will you need to meet with the people and summarize their responses?
  - Will you conduct a survey? Who will be involved? How much time will it take people to complete it? How much time will it take to prepare it and tabulate the results?

# Preliminary Investigation Overview

- Step 4: Analyze Project Usability, Cost, Benefit, and Schedule Data
  - How much will it cost to analyze the information gathered and to prepare a report with findings and recommendations?

# Preliminary Investigation Overview

- Step 5: Evaluate Feasibility
  - Start by reviewing the answers to the questions you asked
  - Operational feasibility
  - Technical feasibility
  - Economic feasibility
  - Schedule feasibility

# Preliminary Investigation Overview

- Step 6: Present Results and  
*យុទ្ធសាស្ត្រ / សេវានិភ័យ*  
Recommendations to Management
  - The final task in the preliminary investigation is to prepare a report to management
  - The format of the preliminary investigation report varies from one company to another

# Preliminary Investigation Overview

- Step 6: Present Results and Recommendations to Management
  - Introduction
  - Systems request summary
  - Findings
  - Case for action



# Preliminary Investigation Overview

រាយការណ៍សំខាន់

- Step 6: Present Results and Recommendations to Management
  - Project Roles
  - Time & cost estimates \*
  - Expected benefits \*
  - Appendix

① ប័ណ្ណតម្លៃ និងការងារ

② វិវាទ ពាណិជ្ជកម្ម និងការងារ

③ សំណើនូវដំណឹងរបស់ខ្លួន