Systems Analysis and Design with UML Version 2.0

An Object-Oriented Approach, Second Edition

Chapter 3: Project Initiation

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PROJECT INITIATION

Chapter 3

Key Ideas

- Projects being when someone sees an opportunity to create business value from using information technology.
- Feasibility analysis is used to aid in the decision of whether or not to proceed with the IS project.

Key Ideas

- The project sponsor is a key person proposing development or adoption of the new information technology .
- The approval committee reviews proposals from various groups and units in the organization and decides which to commit to developing.

IDENTIFYING BUSINESS VALUE

System Request

- Lists key elements of the project
  - Project name
  - Project sponsor
  - Business need
  - Functionality
  - Expected value
  - Special issues or constraints

CD Selections

- An ongoing-case study used to illustrate concepts presented in the text

Your Turn

- If you were building a web-based system for course enrollment --
  - What would be the functionality?
  - What would be the expected value?
  - What special issues or constraints would you foresee?

FEASIBILITY ANALYSIS

Feasibility Analysis

- Detailing Expected Costs and Benefits
  - Technical feasibility
  - Economic feasibility
  - Organizational feasibility

Technical Feasibility: *Can* We Build It?

- Familiarity with application
  - Knowledge of business domain
- Familiarity with technology
  - Extension of existing firm technologies
- Project size
  - Number of people, time, and features

Economic Feasibility

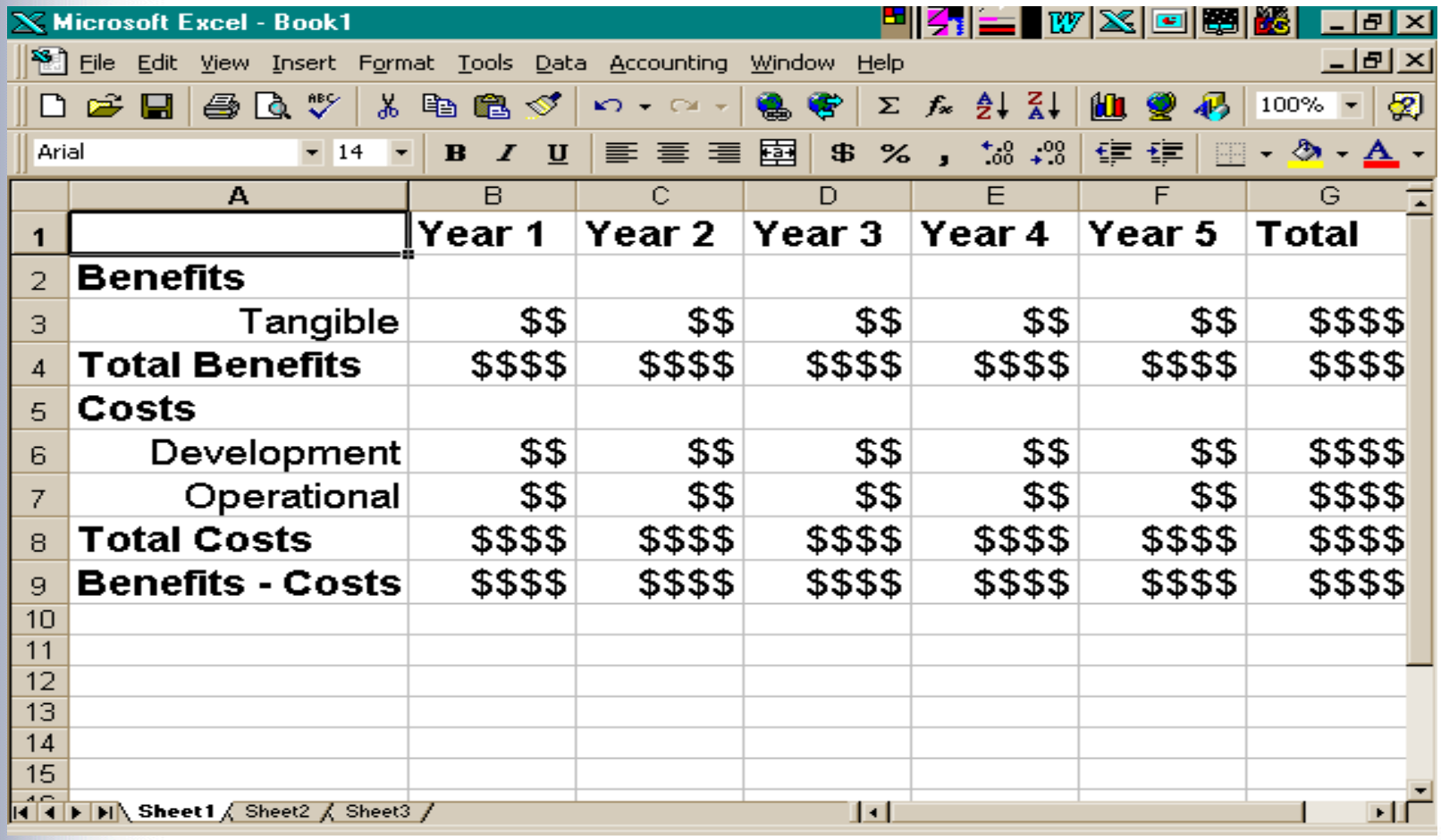
Should We Build It?

- Development costs
- Annual operational costs
- Annual benefits
- Intangible costs and benefit

Expected Value

	Costs	Benefits
Tangible	* * *	* * *
Intangible	* * *	* * *

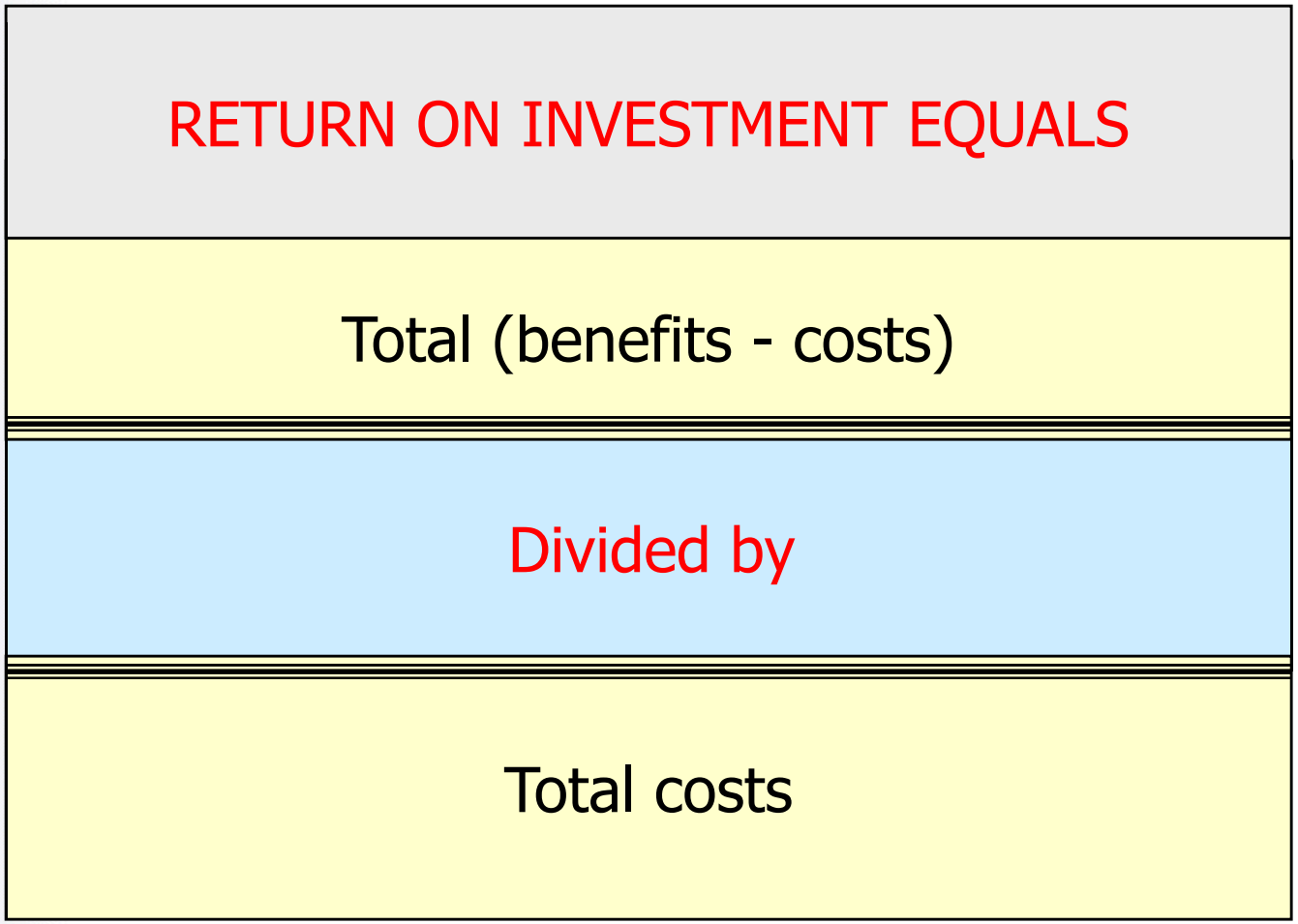
Cash Flow Method for Cost Benefit Analysis



	A	B	C	D	E	F	G
1		Year 1	Year 2	Year 3	Year 4	Year 5	Total
2	**Benefits**						
3	Tangible	$$	$$	$$	$$	$$	$$$$
4	**Total Benefits**	$$$$	$$$$	$$$$	$$$$	$$$$	$$$$
5	**Costs**						
6	Development	$$	$$	$$	$$	$$	$$$$
7	Operational	$$	$$	$$	$$	$$	$$$$
8	**Total Costs**	$$$$	$$$$	$$$$	$$$$	$$$$	$$$$
9	**Benefits - Costs**	$$$$	$$$$	$$$$	$$$$	$$$$	$$$$
10							
11							
12							
13							
14							
15							

Sheet1 Sheet2 Sheet3

Return on Investment Calculation



Net Present Value Calculation

NET PRESENT VALUE EQUALS

Some amount of money

Divided by

$(1 + \text{interest rate})^n$

Where "n" equals the number of periods

Organizational Feasibility

If we build it, will they come?

- Stakeholder analysis considers
  - Project champion(s)
  - Organizational management
  - System users

APPLYING THE CONCEPTS AT CD SELECTIONS

CD Selections

- What technical, economic, and organizational issues will developers of this system need to be aware of?

Summary

- Project initiation involves creating and assessing goals and expectations for a new system
- Identifying the business value of the new project is a key to success
- The system request describes an overview of the proposed system.
- The feasibility study is concerned with insuring that technical, economic, and organizational benefits outweigh costs and risks

Expanding the Domain

- For an excellent source of information on IT management see:
- www.cio.com