

LECTURE 2 PROJECT INITIATION

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
- Feasibility study is concerned with insuring that technical, economic, and organizational benefits outweigh costs and risks

PROJECT INITIATION -- IDENTIFYING PROJECTS WITH BUSINESS VALUE

How Do Projects Begin?

- Business needs should drive projects.
- Project sponsor recognizes business need for new system and desires to see it implemented.
- Business needs determine the system's functionality (what it will do).
- The project's business value should be clear.

Initial System Request

- A document describing business reasons for project and system's expected value.
- Lists project's key elements
 - Project sponsor
 - Business need
 - Business requirements
 - Business value
 - Special issues or constraints

System Request Examples

- Project sponsor – VP of Marketing
- Business need – Reach new customers and improve service to existing customers
- Business requirements – Provide web-based shopping capability
- Business value - \$750,000 in new customer sales; \$1.8M in existing customer sales
- Special issues or constraints – System must be operational by holiday shopping season

Preliminary Project Acceptance

- System request is reviewed by approval committee
- Based on information provided, project merits are assessed.
- Worthy projects are accepted and undergo additional investigation – the feasibility analysis.

FEASIBILITY ANALYSIS

Feasibility Analysis

- Detailed business case for the project
 - Six Categories
- Compiled into a feasibility study
- Feasibility is reassessed throughout the project

Assessing Project Feasibility

- Six Categories
 - Economic
 - Operational
 - Technical
 - Schedule
 - Legal and contractual
 - Political

Economic Feasibility -- *Should We Build It?*

- Identify costs and benefits
- Assign values to costs and benefits

- Determine cash flow
- Assess financial viability
 - Net present value
 - Return on investment
 - Break even point

Assessing Economic Feasibility

- Cost – Benefit Analysis
- Determine Benefits
 - Tangible Benefits
 - Can be measured easily
 - Examples
 - Cost reduction and avoidance
 - Error reduction
 - Increased flexibility
 - Increased speed of activity
 - Increased management planning and control
 - Intangible Benefits
 - Cannot be measured easily
 - Examples
 - Increased employee morale
 - Competitive necessity
 - More timely information
 - Promotion of organizational learning and understanding
- Determine Costs
 - Tangible Costs
 - Can easily be measured in dollars
 - Example: Hardware
- Determine Costs (Continued)
 - Intangible Costs
 - Cannot be easily measured in dollars
 - Examples:
 - Loss of customer goodwill
 - Loss of employee morale
 - One-Time Costs
 - Associated with project startup, initiation and development
 - Includes
 - System Development
 - New hardware and software purchases
 - User training
 - Site preparation
 - Data or system conversion
 - Recurring Costs
 - Associated with on-going use of the system
 - Includes:
 - Application software maintenance
 - Incremental data storage expense
 - New software and hardware releases
 - Consumable supplies
 - Time value of money (TVM)
 - The process of comparing present cash outlays to future expected returns.

Assign Cost and Benefit Values

- Difficult, but essential to estimate
- Work with people who are most familiar with the area to develop estimates

- Intangibles should also be quantified
- If intangibles cannot be quantified, list and include as part of supporting material

Assess Financial Viability – *Net Present Value*

- $NPV = \sum PV(\text{future cash inflows}) - \sum PV(\text{future cash outflows})$

- $PV = \frac{\text{Cash flow amount}}{(1 + \text{Interest Rate})^n}$
 - interest rate = required return
 - n = number of years in future

Assess Financial Viability – *Return on Investment*

$$ROI = \frac{NPV}{\sum PV(\text{Cash Outflow})}$$

Assess Financial Viability – *Break Even Point*

- How long before the project's returns match the amount invested
- The longer it takes to break even, the higher the project's risk.

Technical Feasibility -- *Can We Build It?*

- Users' and analysts' familiarity with the business application area
- Familiarity with technology
 - Have we used it before? How new is it?
- Project size
 - Number of people, time, and features
- Compatibility with existing systems

Assessing Other Project Feasibilities

- Operational Feasibility
 - Assessment of how a proposed system solves business problems or takes advantage of opportunities
- Schedule Feasibility
 - Assessment of timeframe and project completion dates with respect to organization constraints for affecting change
- Legal and Contractual Feasibility
 - Assessment of legal and contractual ramifications of new system
- Political Feasibility
 - Assessment of view of key stakeholders in organization toward proposed system

Organizational Feasibility -- *If we build it, will they come?*

- Strategic alignment
 - How well do the project goals align with business objectives?
- Stakeholder analysis
 - Project champion(s)
 - Organizational management
 - System users

RISK FACTORS

Factors Affecting Project Risk

- Each of the 11 factors below is rated as:
 - Low risk → -1
 - Medium risk → 0
 - High risk → +1
- The total of these 11 factors is the overall risk measure for the project

Factors Affecting Project Risk

- Characteristics of the System Environment
 - Stable, well-defined objectives
 - Structured, clear procedures
- Characteristics of the Information System
 - Model available or requirements stable and readily specifiable?
 - Procedures addressed are routine and well-structured?
 - Only one existing system affected by proposed system?
 - Project can be completed within one year?
- Characteristics of the Users
 - Users have functional expertise?
 - Users have experience participating in systems development?
 - Users are committed to the project?
- Characteristics of the development team
 - Developers have experience developing similar systems?
 - Developers are skilled at eliciting requirements?