

**Mansoura University
Faculty of Computers
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Department of
Information System
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Agile Methods

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Lecture 3

Business Planning

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2025



Business Planning

- **A framework for strategic system development**
 - Mission and Vision Statement
 - SWOT Analysis
- **Business Case**
- **IS Projects**
- **Evaluation of System Requirements**
- **Feasibility Study**
- **Setting Priorities**
- **Preliminary Investigation**



[illegible]

- The term **business case** refers to the reasons, or justification, for a proposal.
- IT team must understand and support the firm's **long-term strategic** goals..



Framework for strategic system Development

Strategic planning is the process of identifying **long-term** organizational goals, strategies, and resources.



Strategic Plan

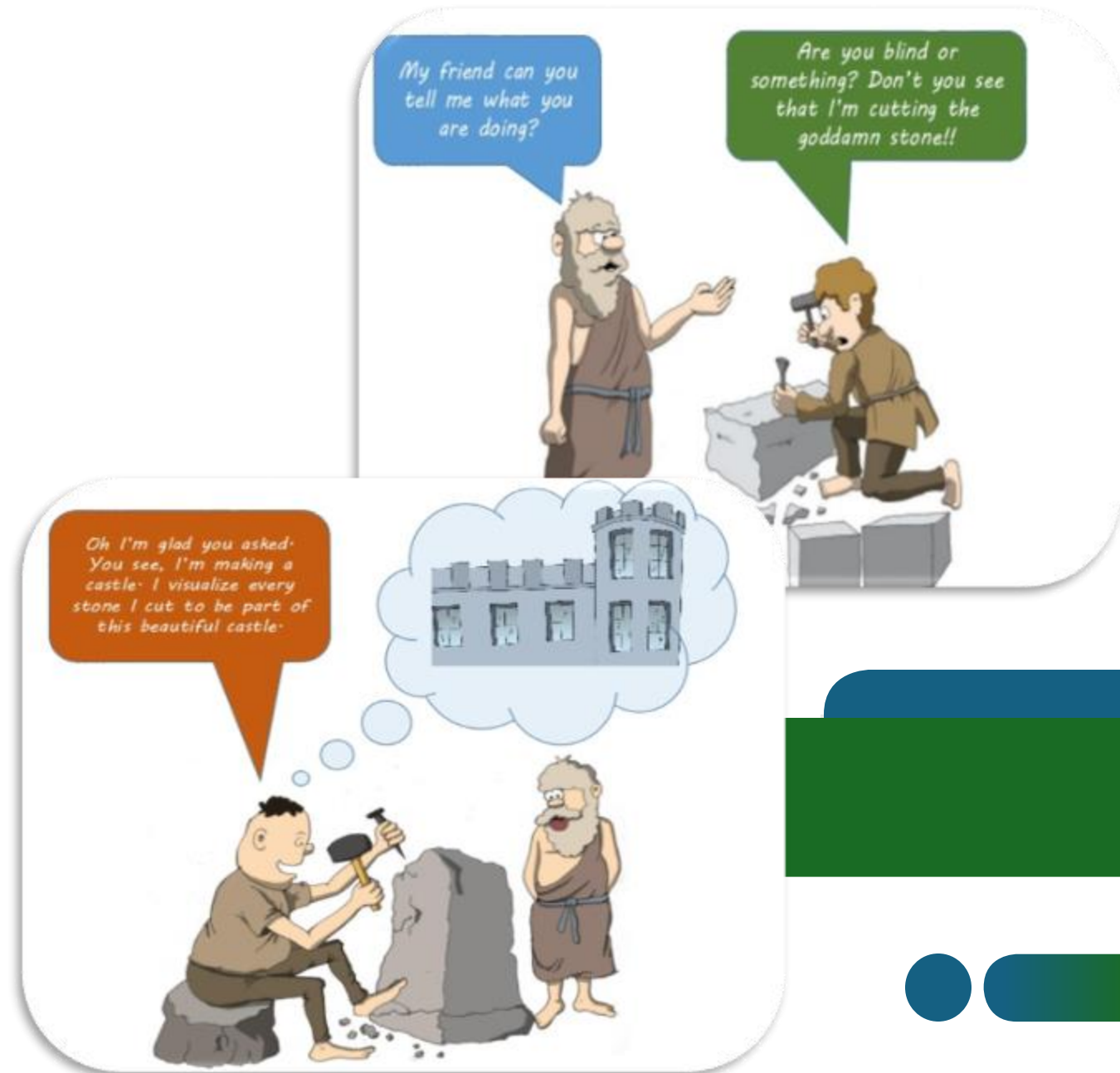
A **strategic plan** looks beyond **day-to-day activities** and focuses on a horizon that is three, five, ten, or more years in the future.

Think about a **chess game** and a company as a player who think for the next 10 steps not only the next.

Why should a systems analyst be interested in strategic planning?

- The answer might be found in an old story about two stonecutters who were hard at work when a passerby asked them what they were doing. "I'm cutting stones," said the first worker. The second worker replied, "I'm building a cathedral."

So it is with information technology: One analyst might say, "I am using a CASE tool," while another might say, "I am helping the company succeed in a major new business venture."



MISSION AND VISION STATEMENT

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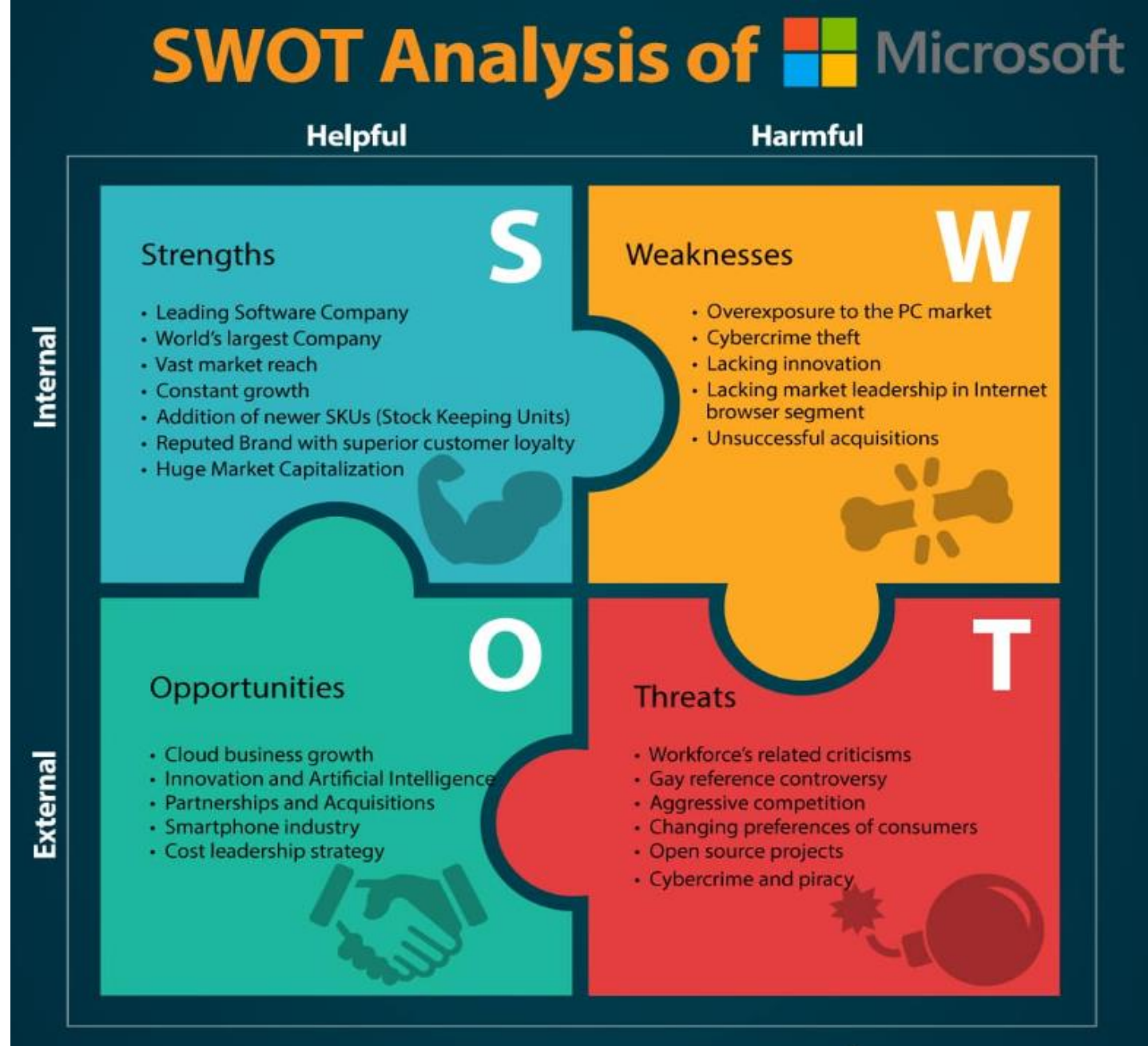
MICROSOFT MISSION AND VISION STATEMENT ANALYSIS

Microsoft’s mission statement is “**to empower every person and every organization on the planet to achieve more.**” ‘Empowerment’ is the key term in this mission statement. It represents the primary objective of the company and what the strategic tactics of the organization seek to achieve. It also zeros on two major recipients of the ‘empowerment,’ the people and organizations. Some of the components that emerge from this mission statement include:

SWOT ANALYSIS

- A **SWOT** analysis can focus on a specific product or project, an operating division, the entire company, or the mission statement itself.

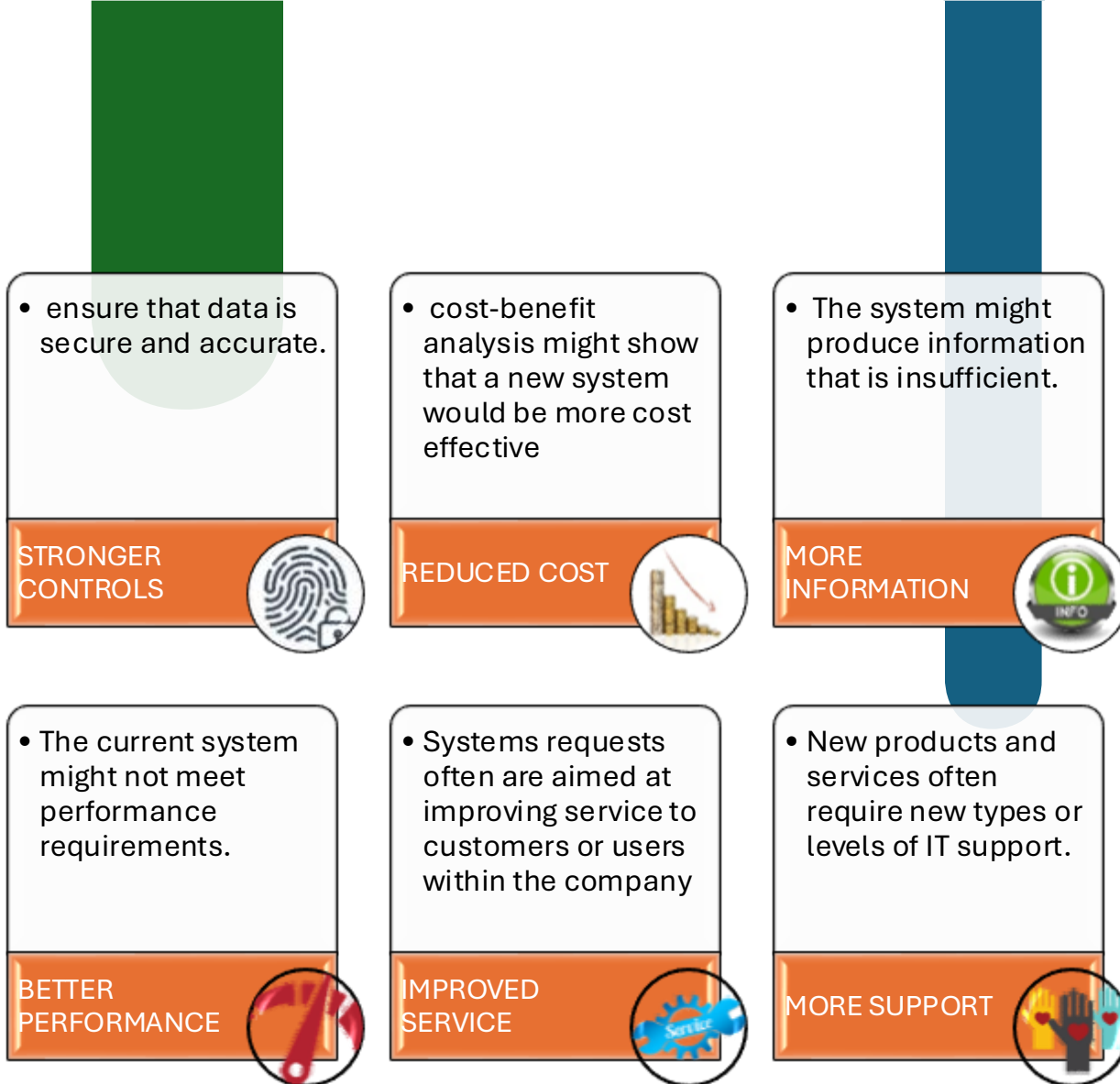
The overall aim is to avoid seeking goals that are unrealistic, unprofitable, or unachievable.



SYSTEMS PROJECTS

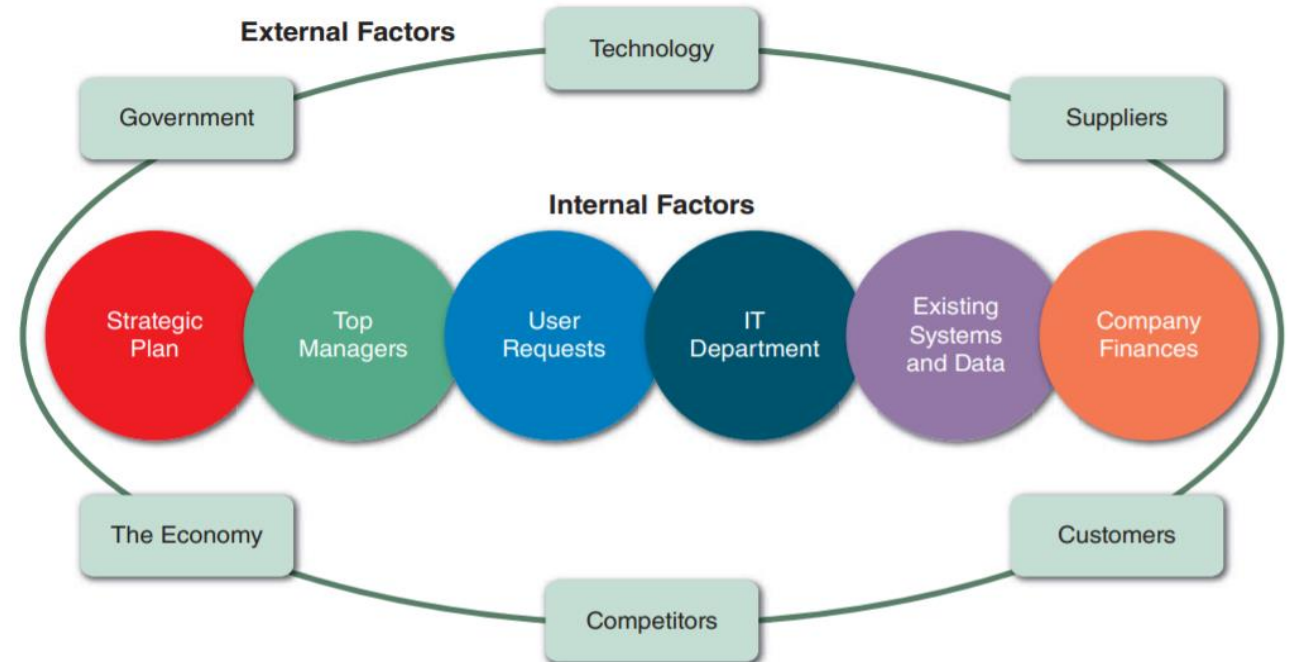
The starting point for most projects is called a **systems request**, which is a **formal way** of asking for IT support.


The Reasons of system Request can be illustrated in following figure




FACTORS THAT AFFECT SYSTEMS PROJECTS

- Internal and external factors affect every business decision that a company makes.






Which projects should the firm pursue?



What criteria should be applied?



How should priorities be determined?



Evaluation of system requirements



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**.

They ask main 3 questions

To answer these questions, the individual or the committee must assess the **feasibility** of each request.

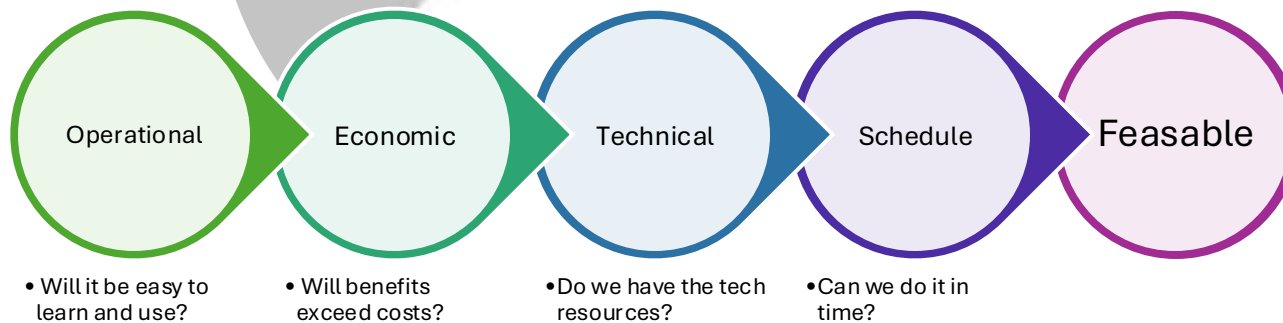
Systems request must pass several tests, called a feasibility study

Feasibility Study

feasibility study uses four main yardsticks to measure a proposal: **operational feasibility**, **economic feasibility**, **technical feasibility**, and **schedule feasibility**.

Tangible benefits are benefits that can be measured in dollars.

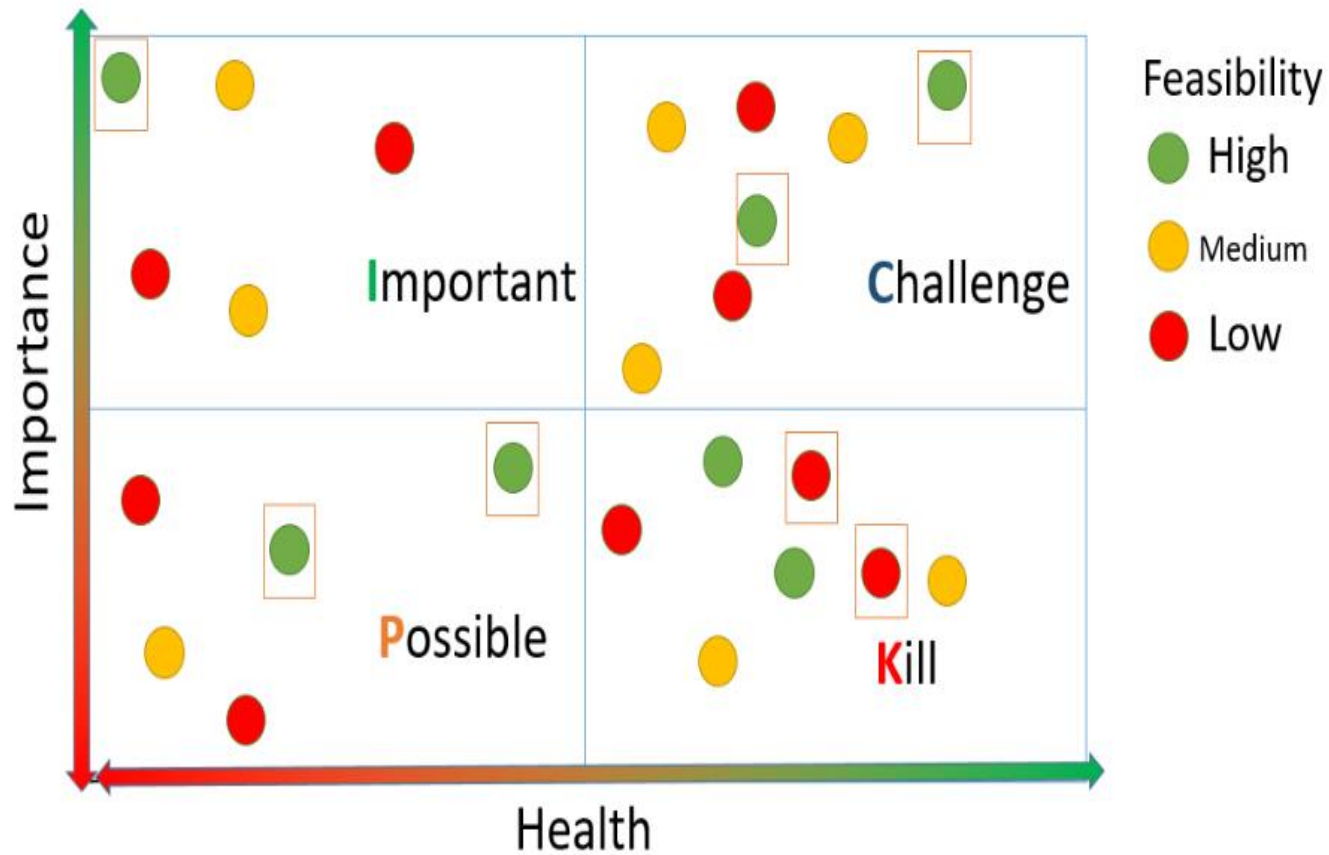
Intangible benefits are advantages that are difficult to measure in dollars but are important to the company.



Evaluating Feasibility

- The first step in evaluating feasibility is to **identify and weed out** systems requests that are not feasible.
- system requests that **are not currently feasible** can be resubmitted as new hardware, software, or expertise becomes available.





Setting Priorities

The feasibility is not the only thing that can make it a standard for choosing the requirement, such process have **2 other metrics**.

Importance Which processes have greatest impact on the organization's strategic objectives?

Health (or Dysfunction) Which processes are in deepest trouble?

All requirements can be addressed to a **PICK** chart

Try to find a request have **low health, High feasible and Important**

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**.





Investigation

PRELIMINARY INVESTIGATION

A systems analyst conducts a **preliminary investigation** to study the systems request and recommend specific action.



Preliminary Investigation

the analyst interacts with **managers, users, and other stakeholders**

The analyst performs **fact-finding** to get the problem or opportunity, project scope and constraints, project benefits, and estimated development time and costs.

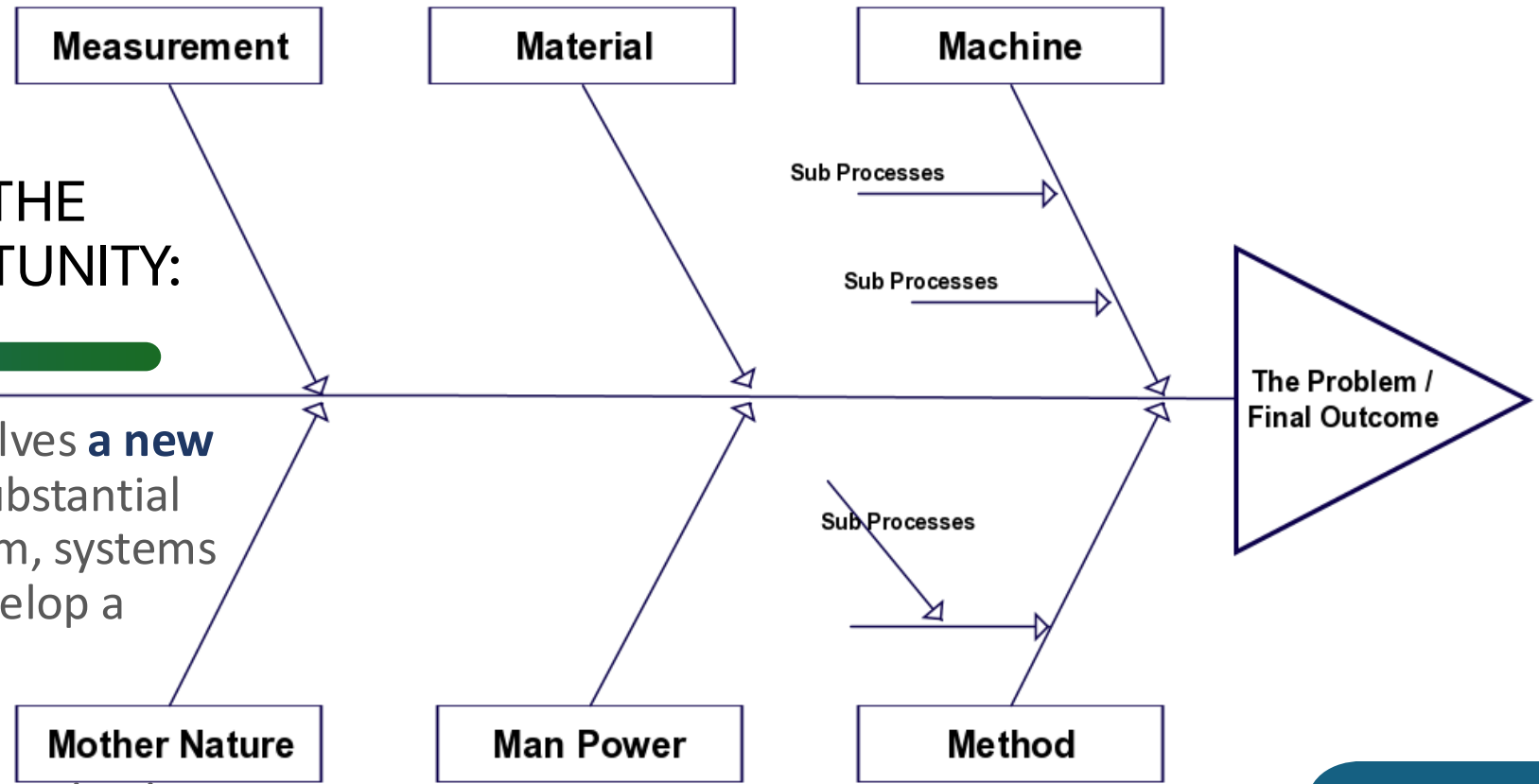
- 1 Understand the problem or opportunity
- 2 Define the project scope and constraints
- 3 Perform fact-finding
 - Analyze organization charts
 - Review documentation
 - Observe operations
 - Conduct a user survey
- 4 Study usability, cost, benefit, and schedule data
- 5 Evaluate feasibility
 - Operational
 - Technical
 - Economic
 - Schedule
- 6 Present recommendations to management

Planning the Preliminary Investigation

During a preliminary investigation, a systems analyst typically follows a **series of steps**

STEP 1: UNDERSTAND THE PROBLEM OR OPPORTUNITY:

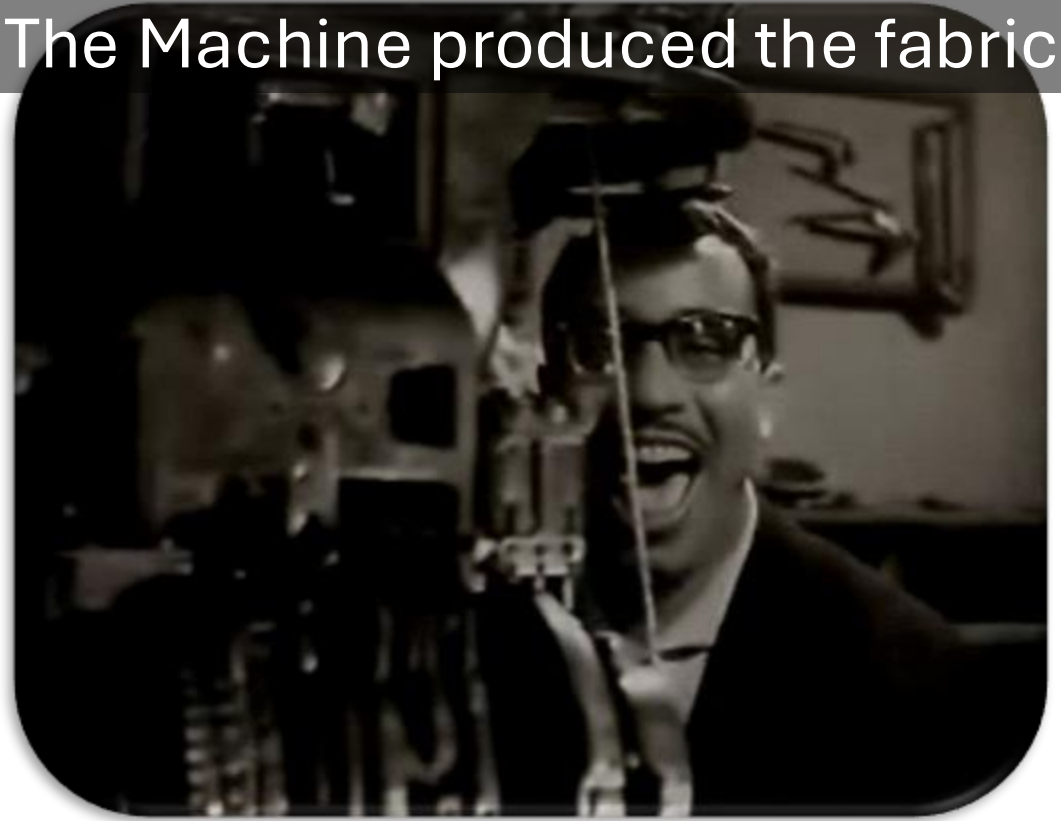
- If the systems request involves **a new information system** or a substantial change in an existing system, systems analysts might need to develop a **business profile**
- A popular technique for investigating causes and effects is called a **fishbone diagram**



The Machine produced the fabric

STEP 2: DEFINE THE PROJECT SCOPE AND CONSTRAINTS:

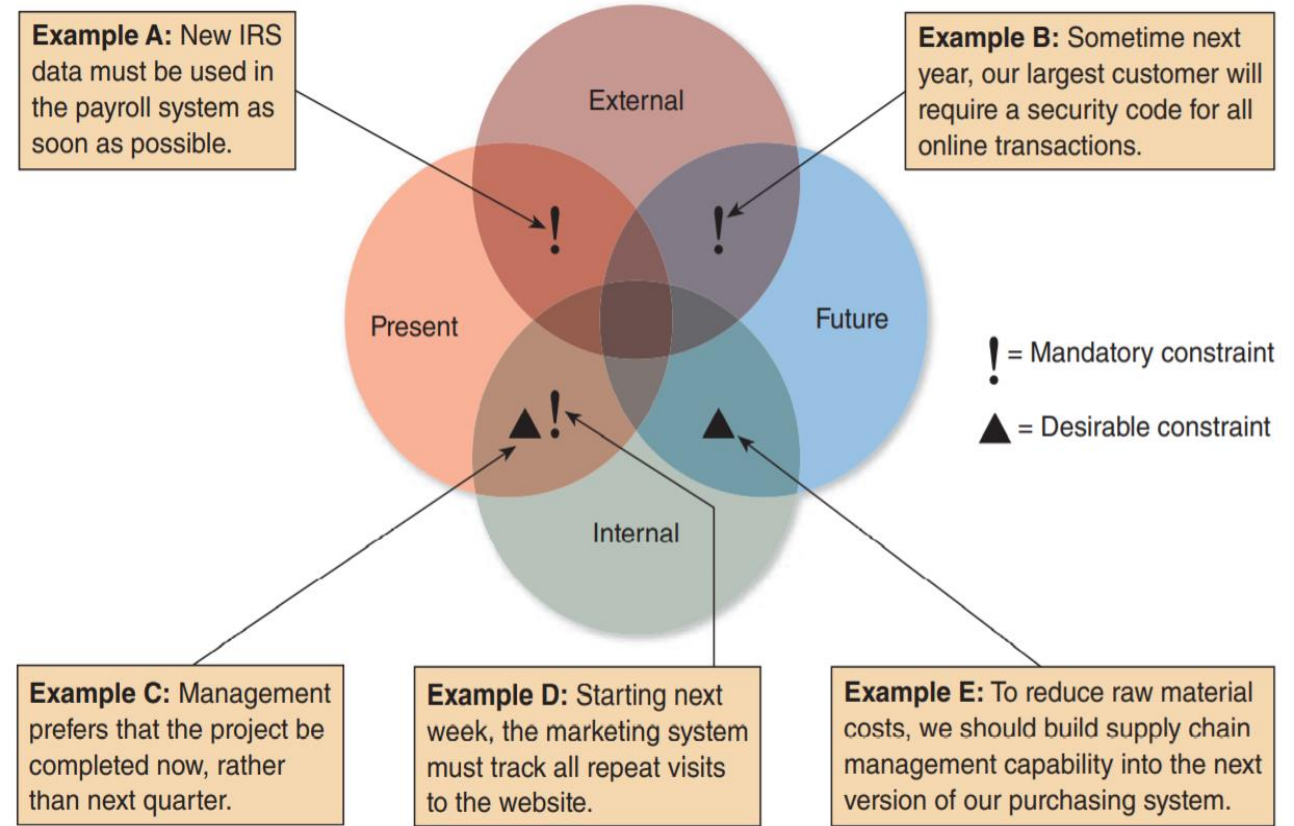
- Project scope means defining the specific **boundaries**, or extent, of the project
- Imagine a machine the worker adds to it the cotton to get the **fabric**, the scope is a **bounded context** from the Machine starts to work until it finishes.
- Already every process in the project has its own **bounded context**
- **Domain Driven Design Patterns**



STEP 2: DEFINE THE PROJECT SCOPE AND CONSTRAINTS:

- Projects with very **general scope** definitions are at **risk** of expanding gradually, without specific authorization, in a process called **project creep**.
- Constraints** on the system must be identified. A constraint is a requirement or condition that the system must satisfy or an outcome that the system must achieve.

Sample Constraints Shown by Timing, Type, and Urgency



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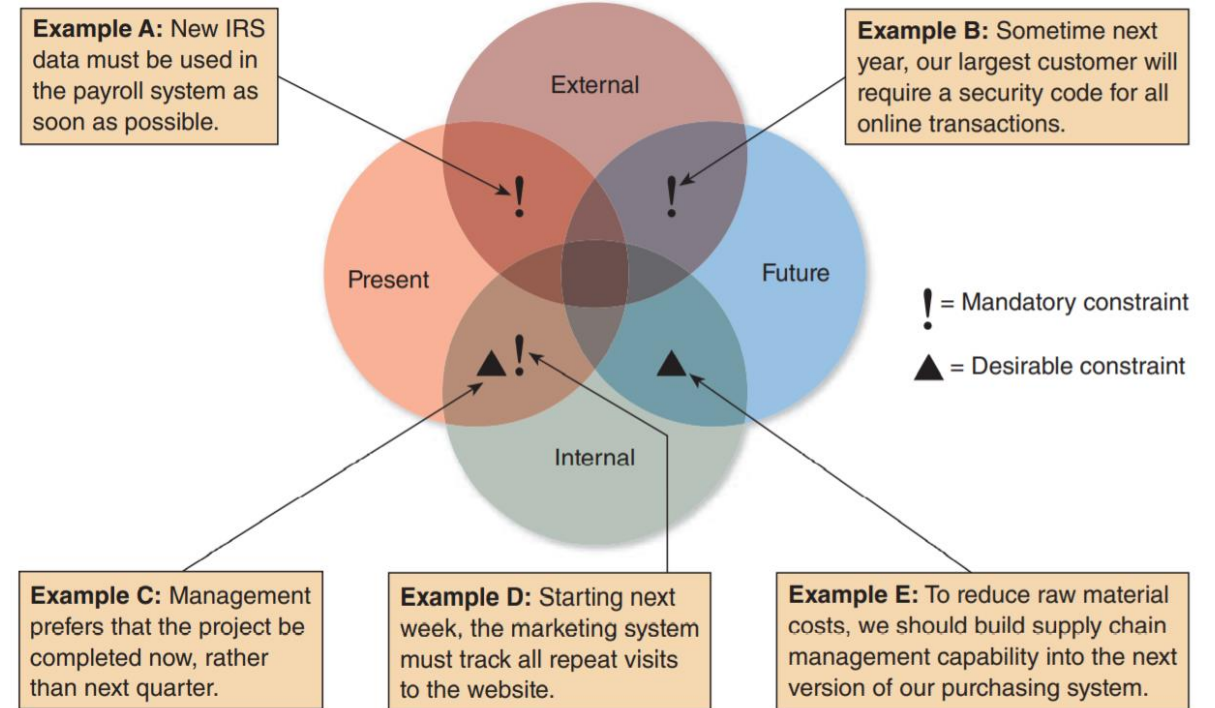
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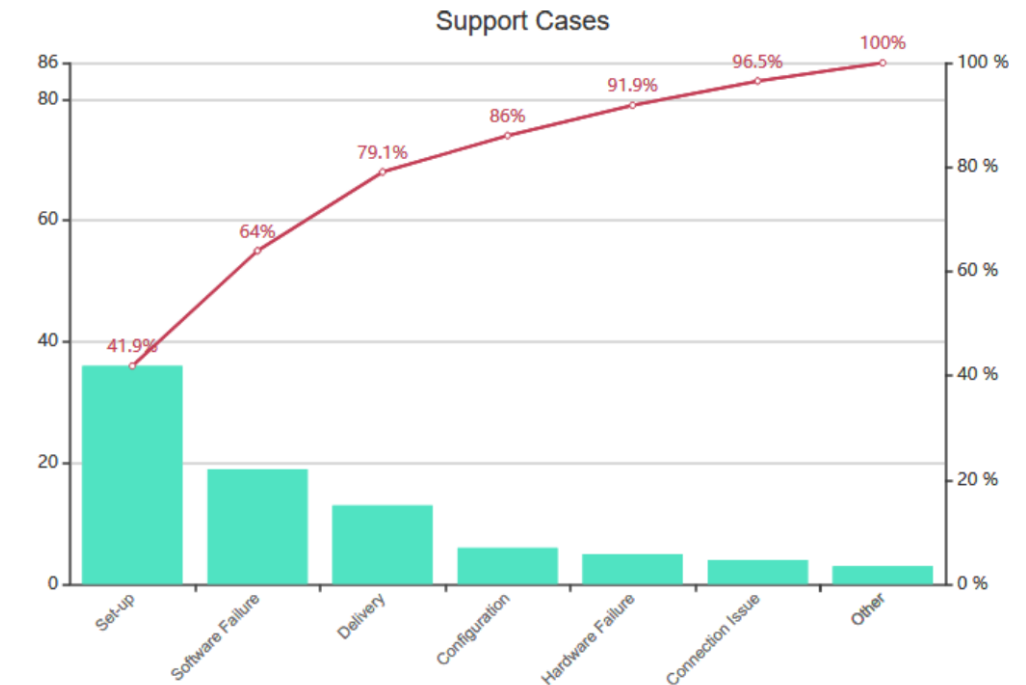
- When examining constraints, their characteristics should be identified, as follows
- **Present versus future.** Is the constraint something that must be met as soon as the system is developed or modified
- **Internal versus external.** Is the constraint due to a requirement within the organization
- **Mandatory versus desirable.** Is the constraint mandatory? Is it absolutely essential to meet the constraint

Sample Constraints Shown by Timing, Type, and Urgency



STEP 3: Perform Fact-Finding

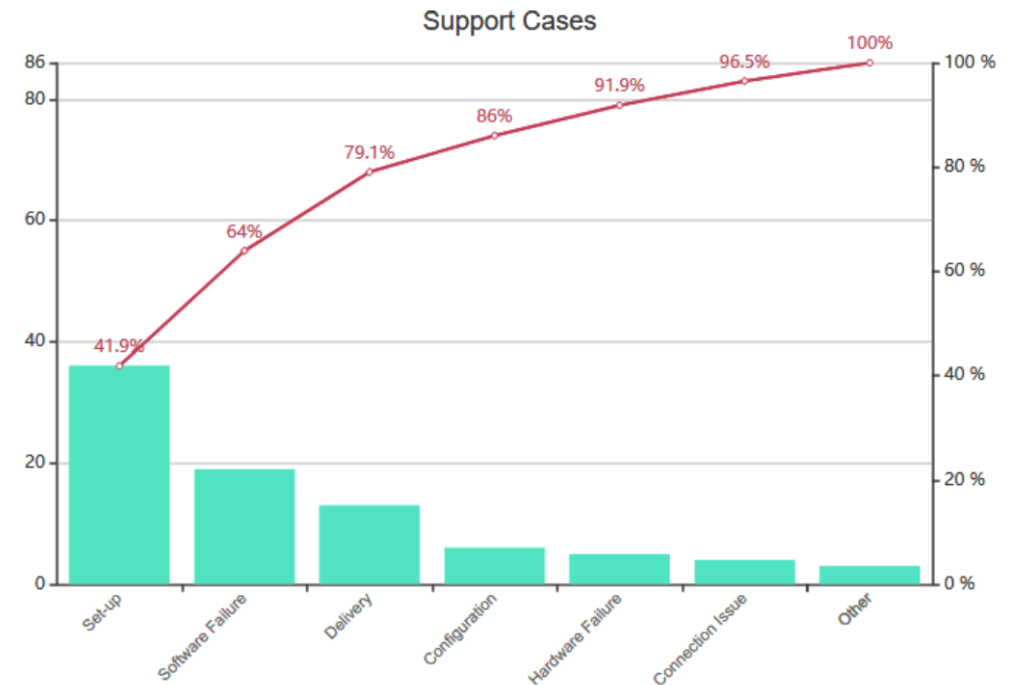
- The objective of **fact-finding** is to gather data about project usability, costs, benefits, and schedules.
- During fact-finding, the analyst might analyze :
 - organization charts
 - - conduct interviews
 - - review current documentation
 - - observe operations
 - carry out a user survey.



Pareto Chart

STEP 3: Perform Fact-Finding

- The analysts must keep their eyes on charts while fact-finding, it presents the current state of organization.
- Pareto chart can map the issues of the system arranged by descending to keep track of mistakes processed from the Issue register, the curve is a cumulative to the bars



Pareto Chart

Step 4: Analyze Project Usability, Cost, Benefit, and Schedule Data

- If cost and benefit data were gathered, **financial analysis and impact statements** can be prepared using spreadsheets and other decision-support tools.
- **Time and cost** estimates should be developed for the requirements modeling tasks for the next SDLC phase



Step 5: Evaluate Feasibility

- Evaluation of the project's feasibility, beginning with reviewing the answers to the questions
- **Operational feasibility.** Fact-finding should have included a review of user needs, requirements, and expectations.
- **Technical feasibility.** The fact-finding data should identify the hardware, software, and network resources needed to develop, install, and operate the system.



Step 5: Evaluate Feasibility

- Evaluation of the project's feasibility, beginning with reviewing the answers to the questions
- **Economic feasibility.** Using the fact-finding data, financial analysis tools can be applied to assess feasibility. The cost-benefit data will be an important factor for management to consider.
- **Schedule feasibility.** The fact-finding data should include stakeholder expectations regarding acceptable timing and completion dates.



Step 6: Present Results and Recommendations to Management

- This stage, there are several alternatives.
- It might be that **no action** is necessary or that some other strategy, such as additional training, is needed.
- To solve a minor problem, a simple solution might be chosen without performing further analysis.
- In other situations, it will be **recommended** that the project proceed to the next phase, which is systems analysis.



Step 6: Present Results and Recommendations to Management

- The report includes an evaluation of the systems request, an estimate of costs and benefits, and a **case for action**.
- The specific format of a preliminary investigation report varies. A typical report might consist of the following sections:
 - **Introduction**
 - System Request Summary
 - Findings
 - Recommendations
 - Project Roles
 - Time and cost estimates
 - Expected Benefits
 - Appendix





THANK YOU!

