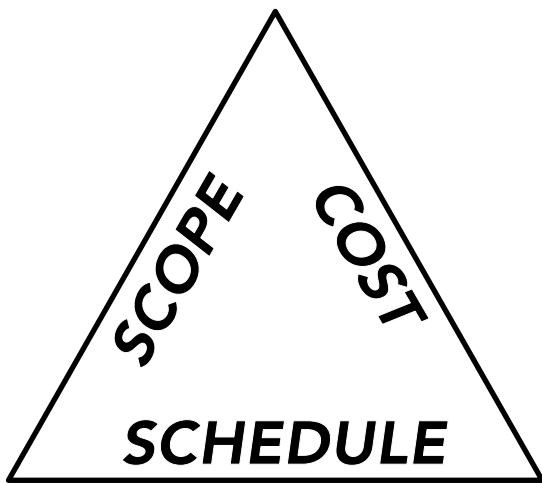


# Scope and Requirements as Project Fundamentals.



Every project has a Scope, a Schedule and a Cost. If any of these changes, the others will change as well. This is a rule and a concept of Project Management theory known as "the iron triangle".

## Project Scope Management

The project scope is the definition of the project based on the characteristics of the results expected and the work required to deliver it. It can be divided in:

### TOOL BOX

- Elicitation plan
- Requirements traceability matrix
- Requirements document
- Project scope statement
- Project charter

**Product Scope**      *Characteristics and results delivered by the product.*

**Service**              *Work to do to deliver the product.*

To know what we need to deliver is fundamental to understand what are the requirements and expected results.

## The Requirements Baseline

A baseline is a **specification** or product that has been formally **reviewed and agreed on**, that thereafter serves as the basis for further development, and that can be changed only through formal change control procedures.

\*Definition by: The Institute of electrical and Electronics Engineers (IEEE).



# Requirements Management

**IDENTIFY** the types of requirements:

## Types of Requirements

- Business or mission requirements
- User requirements
- Functional requirements
- Stakeholders requirements
- Quality requirements
- Project requirements

## Sources of information

- Stakeholders
  - Focus Groups
  - Facilitated Work Shops
  - Questionnaires
  - Surveys
  - Prototypes
  - Benchmarks
- Project Charter
  - Bid documents
  - Product specifications

**COLLECT & REGISTER** utilizing a:

- Project Elicitation Plan
- Requirements Traceability Matrix

**VALIDATE** the established requirements.

- Are we meeting the project needs?
- Are the established requirements clear?

Utilize a Requirements Ambiguity Checklist

- Requirements are clear to the intended audience, with only one interpretation.
- Terms are defined in a glossary and use consistently.
- Poor grammar that causes on intended meaning (or no meaning at all) has been removed.
- All "dangling else" statements have been removed.
- Terms relying on personal opinion, such as fast, easy, state of the art, obvious, simple, relatively, as appropriate, and excellent, have been removed.
- Words without the precise meaning, such as soon, virtually, more, most, some, similar, eventually, and recent, have been removed.
- Unbounded lists, such as TBD, etc., At least, including, such as, and at a minimum, have been eliminated.
- Optionally words, such as should, could, possibly, if possible, or may, have been eliminated.

**CONTROL** the changes in scope and requirements.

**Uncontrolled project scope results:**

- Cause undocumented delay
- Increase the cost without approval
- Damage morale and productivity
- Spoil relationships

# What factors might influence the project?

## ***Enterprise Environmental Factors***

Internal or external

- ⦿ **Organizational culture, structure and governance.**
- ⦿ **Geographical distribution of human and material resources.**
- ⦿ **Infrastructure**
  - What already exists in the organization?
  - Is there a department or office that can help?
  - Are there people to assist you in this process or this endeavor?
- ⦿ **Information technology software.**
- ⦿ **Resource availability**
  - Contracting, purchasing constraints, suppliers, contractors, etc.
- ⦿ **Employee capability and availability**
  - Do you have enough people to do the job?
  - Do they have the right skills?
- ⦿ **Other factors**
  - Subcontracting negotiations, shipping delays, weather incidents, etc.