

**PMEducation**

**CONSTRAINTS and NOT-to-FORGET LIST**

Every project is subject to constraints. These are limiting factors that affect the execution of your project. It is important to identify and list all constraints before starting to plan. This way your plan will not violate any of those project constraints. Get help from your Project Team to ensure you haven’t missed any. Here is a checklist of types of constraints to consider:

CONSTRAINTS:

* Safety limitations.
* Physical, geometrical. Too big? Too small? Right shape?
* Legal. Not breaking any laws?
* Law of Nature. Gravity. Electro-magnetic? Sound? Temperature? Moisture? Pollutants?
* Personal Preferences. Check Stakeholder expectations and requirements.
* Technology available.
* Standards. Standard practices, processes, and procedures.
* Available facilities, talent, equipment.
* Interactions with sub-systems.
* Ergonomics.
* Aesthetics
* Serviceability.
* Competition in the market place.
* Future adaptability to upgrading up-sizing.

CONSTRAINTS of Knowledge Areas:

Usually one or more of the Knowledge Areas (see list below) are constrained, and we need to work within given limits. Most typical are:

* Time constraints. Project must be completed before a certain date.
* Cost constraints. Project must no cost more than a given amount of money.

KNOWLEDGE AREAS

In Professional Project Management, the list known as Knowledge Areas is following:

Initiating, Scope, Time, Cost, Quality, Human Relations, Communications, Risk, Procurement, Stakeholders. These ideas are developed throughout our webpage.

NOT-to-FORGET:

Several years ago I started making a list of things not-to-forget. It seemed I sometimes forgot the same things on every project so a checklist like this became very useful. Over the years my checklist expanded; added to by things I …… well, forgot! In studying for my pilot license, I learned that even airline pilots (who fly the same plane day after day) use written checklists. I am glad they do, and I am glad I use project checklists too. You will want to make your own checklist based on your own experience and types of project. Here are a few items from my days in Plant Projects:

 Safety Items

* Ladders, Guardrails, Catwalks
* Signs, Labels, Tags, Pipe markings
* Insulation
* Eyewash
* Emergency Lighting
* Lock out Station
* Fire Extinguishers
* Fire Suppression
* Fire Alarm
* First Aid Kits
* MSDS Station

Utility Items

* Air: Instrument, Utility, Other
* Water: Raw, Potable, Cooling, Boiler feed, Condensate, Demineralized
* Other water: Process, Waste
* Gases: Natural gas, propane, others
* Electrical Supply: High Voltage, Low Voltage, Instrument
* Steam: High Pressure, Low Pressure