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A briefing on the "Triple Constraints" by each student...

Cost:

This is the estimation of the amount of money that will be required to complete the project. Cost itself encompasses various things, such as: resources, labor rates for contractors, risk estimates, bills of materials, et cetera. All aspects of the project that have a monetary component are made part of the overall cost structure.

☐ Time (Schedule):

This refers to the actual time required to produce a deliverable. Which in this case, would be the end result of the project. Naturally, the amount of time required to produce the deliverable will be directly related to the amount of requirements that are part of the end result (scope) along with the amount of resources allocated to the project (cost)

Scope:

These are the functional elements that, when completed, make up the end deliverable for the project. The scope itself is generally identified up front so as to give the project the best chance of success. (Although scope can potentially change during the project life-cycle, a concept known as 'scope creep') Note that the common success measure for the scope aspect of a project is its inherent quality upon delivery.

□ The triple constraint is about balancing each constraint to reach a successful conclusion. As the project progresses, the project manager may find that any changes impact one or more of the constraints. What might happen? Here are some examples:

During an automotive engineering project, an unexpected budget cut is imposed on your project after the company posts poorer than expected 4th quarter financial results.

Impact:

Scope is cut, quality is reduced, and the schedule is pushed back so that cheaper resources can be found. The most significant constraint, in this case, is the cost (the money the company is willing to spend).

During a project to create a new mobile phone handset, your customer asks that the launch date is brought forward two weeks to coincide with a major industry show.

Impact:

Costs increase as more people are added to meet the new deadline. Some features of the product are removed and put into a phase two release to reduce delivery time and meet the new launch date. The most significant constraint, in this case, is time (project schedule).

During a software development project, your customer increases the scope. The client asks that new features be added to the software after learning that a competitor's product will be in direct competition with their own. It is important the product includes these new features if it is to compete successfully.

Impact:

The budget and schedule increase as a result of pushing up the final delivery date. More people are added to minimize disruption to the project schedule, thereby increasing the project's overall cost. The most significant constraint, in this case, is scope (features of the product).

Project Charter

A project charter formally authorizes the project and the project manager to apply resources to project activities.

- A Project starts with the development of "Project Charter" with appointment of PM & other key resources.
- Charter is the document issued by the project initiator or sponsor.
- Charter formally authorizes a project, provides PM with the authority to apply organizational resources to project.
- Charter well-defines project start and boundaries.
- It documents the business needs, assumptions, constraints, the understanding of the customer's needs and high-level requirements, and the new product, service, or result that it is intended to satisfy.

The charter must be signed by someone who can invest authority for the project (typically senior management or a sponsor)

Project Statement of Work (SOW)

- Description of products or services to be delivered by the project.
- Based on business needs, product, or service reqts.
- Sponsor / Customer decides as part of a bid document,
 eg: request for proposal (RFP), request for information (RFI), request for bid, or as part of a contract. The SOW references:

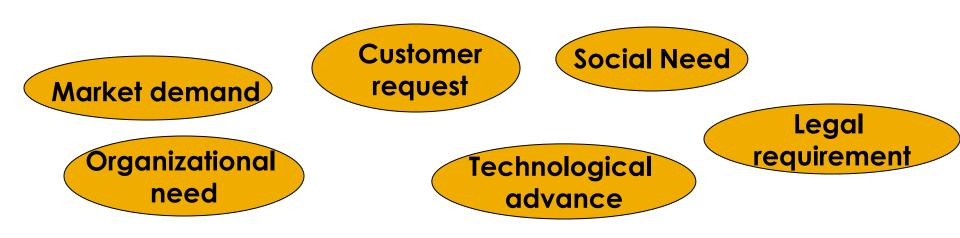
Business need

Product scope description

Strategic plan

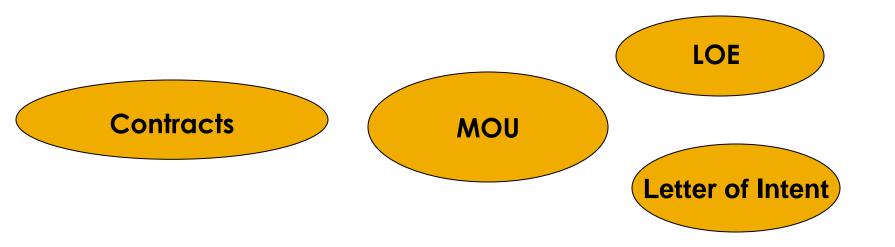
Business Case

- From a business standpoint, determines whether or not the project is worth the required investment.
- Typically the business need and the cost-benefit analysis are contained in the business case to justify the project.
- Customer/Sponsor may write the business case.
- The business case is created as a result of one or more of the following:

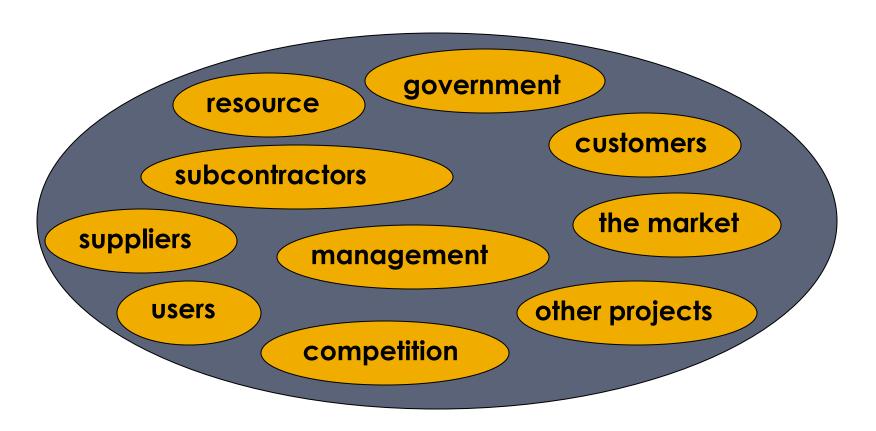


Agreements

- Defines initial intentions for a project.
- May be in a form of Contracts, MOU, SLA, LOE
- Generally used when a project is performed for an external customer.

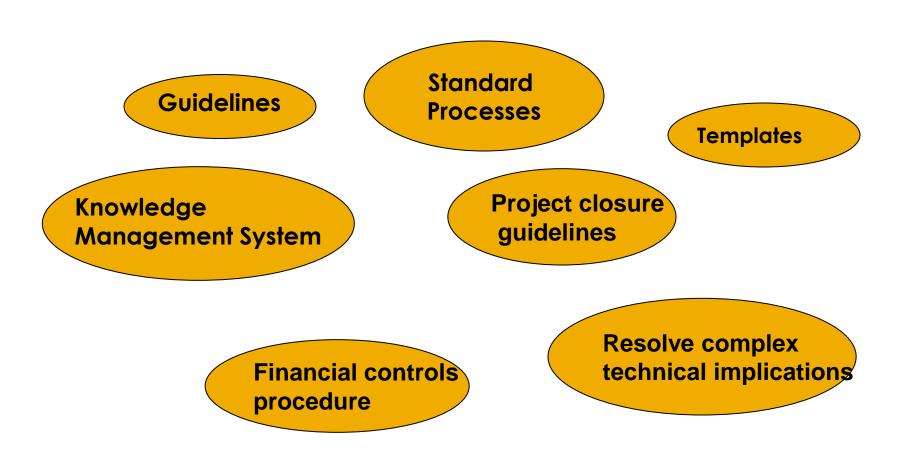


Enterprise Environmental factors



All these factors may affect a project over its life

Organizational Process Assets



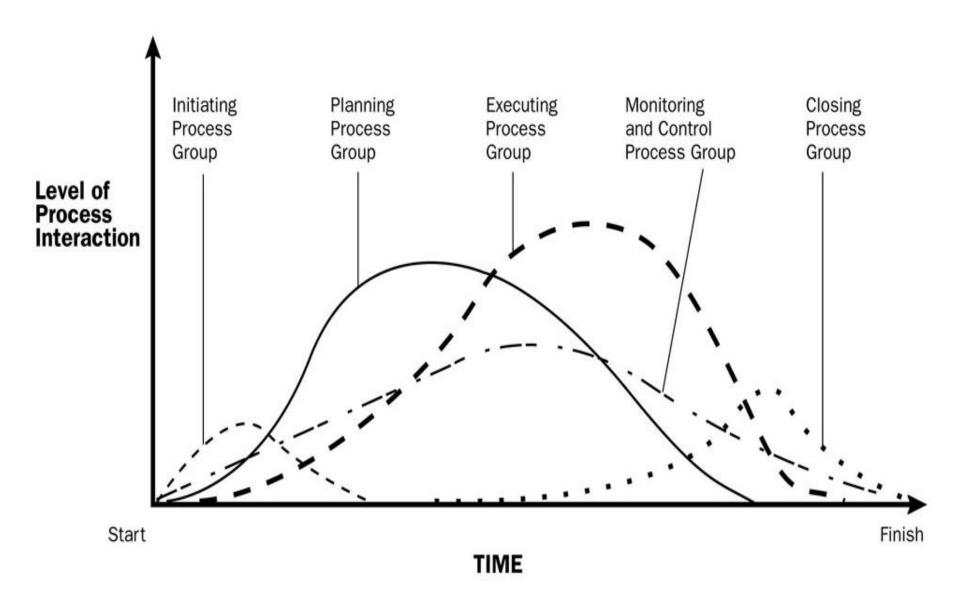
1. Traditional Project management

The "traditional" approach identifies five components, or stages, of a complete project:

Initiation
Planning and design
Execution
Monitoring and controlling
Closing

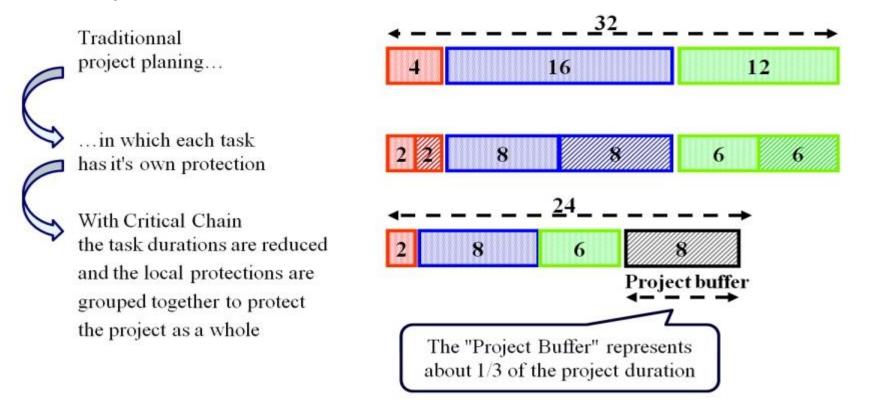
- The simplest version of the traditional approach goes through these components one-byone in the order described; this is known as a "waterfall" model.
- However, things can be more complex than this.
- Although the initiation and closing stages always occur first and last respectively, of course, the middle three stages are more distinct conceptually than chronologically. A project may go back and forth among the middle three stages listed above.

Traditional Project management



2. Critical Chain Project Management (CCPM)

- Emphasizes the efficient use of resources (people, equipment, physical space) and adding buffers.
- Schedules and deadlines are seen as less important due to a fact known as Parkinson's Law, which states that "Work expands so as to fill the time available for its completion."



3. PRINCE 2 (PRojects IN Controlled Environments v2)

- PRINCE2 is used extensively by the UK Government.
- Widely recognized and used in the private sector, both in the UK and internationally.

Key features of PRINCE2:

Focus on business justification
Defined organization structure for the project management team
Product-based planning approach
Emphasis on dividing the project into manageable and controllable stages
Flexibility that can be applied at a level appropriate to the project

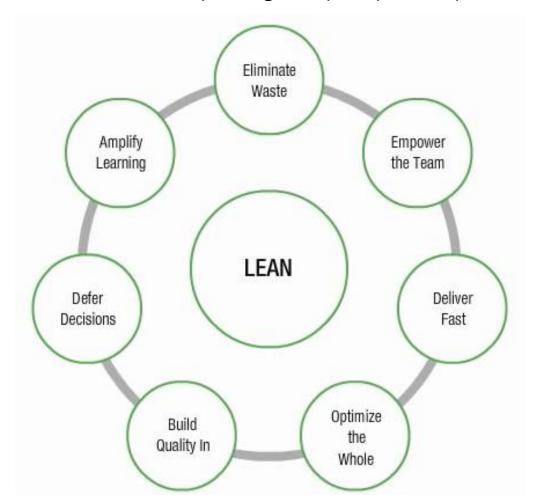


Highlights:

- 1. UK Government approved process oriented methodology
- 2. Reduces impact of risks like staff movement, decision making, stakeholder alignments etc

4. Lean Project Management

This approach to project management is based on the concept of lean-manufacturing.
 Lean-manufacturing is centered on the elimination of wastage in order to minimize the cost of production and hence improving the quality of the product.



5. Agile Project Management

 Agile Project Management is an iterative process that focuses on customer value, team interaction over tasks, and adapting to current business reality.

Maneuverability and Sufficiency.

Being able to respond to change.

Accept that Change is inevitable.

Understand the values.

Use principles as needed to find what works for you.

Mix and match practices to deliver value

Inspect and Adapt.



Group Work

Develop Project Charter - Exercise

Analyze only the "Olympic Stadium construction project" and Develop a Project Charter for the given case.





London's successful bid for the 2012 Olympic Games created the need for a major regeneration and construction programme to provide the venues and infrastructure needed to stage the Game.

The programme of construction was extensive, technically and politically challenging and up against a fixed deadline of the Opening Ceremony in July 2012. Turning the vision of the Olympic Bid into the reality of roads, bridges, stadium was the job of the Project Manager.

ODA (Olympic Delivery Authority) had just over five years to staff up, procure and deliver around £6 billion of major construction works.

The majority of the construction works were to be built on a largely polluted site in Stratford, east London. At the same time the ODA needed to satisfy government, media, local residents and the public.

ODA scope of the entire programme

- Deconstruction & land remediation of approx 400 hectare (ha) site;
- The master planning and submission of approximately 950 individual planning applications;
- The construction of infrastructure around 20 kilometre (km) roads, 13km tunnels, 26 bridges, new utilities infrastructure (water, gas, electricity and telecommunications);
- The construction of 14 permanent and temporary sporting venues and a 12,000 square metre (m2) broadcast centre and 29,000 m2 media centres;
- Construction of the Athletes' Village (to be converted to 2,800 homes for sale after the Games);
- The creation of approximately 100ha of parklands, gardens and public open space;
- Transport improvements, including station & infrastructure works.
- ODA budget was £8 bn, including approx £2 bn of contingency.



Is it a Project, Program or Portfolio?

Turning the vision into the reality → Portfolio

- Construction of the Olympic village
- Construction of the Olympic Stadium
- Restoration of London transport system
- Actual staging of the games it self
- Opening ceremony
- Manage invitees, players etc



Select one project: Olympic Stadium construction project

Q1: Is it Temporary Endeavor?

Q2: What is the Objective (SMART) – make your assumptions

Q3: Who are the key stakeholders of the project?

Q1: Yes, it is Temporary, but the result can be everlasting

Q2: SMART Objectives:

To design and build a world class multi-sporting venue with capacity for 80,000 spectators for the London 2012 Olympic Games in Stratford (East London), to be completed before July 2012, with an estimated budget of GBP 496 million.

Q3: Key Stakeholders

Government, media, local residents Sportsmen, Sportswomen, spectators



Identifying Project Stakeholders

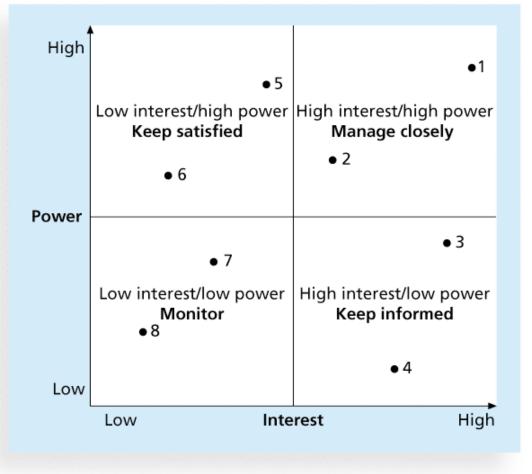
Project stakeholder management is to identify all people or organizations affected by a project, to analyze stakeholder expectations, and to effectively engage stakeholders.

Name	Position	Internal/ External	Project Role	Contact Information
Stephen	VP of Operations	Internal	Project sponsor	stephen@globaloil.com
Betsy	CFO	Internal	Senior manager, approves funds	betsy@globaloil.com
Chien	CIO	Internal	Senior manager, PM's boss	chien@globaloil.com
Ryan	IT analyst	Internal	Team member	ryan@globaloil.com
Lori	Director, Accounting	Internal	Senior manager	lori@globaloil.com
Sanjay	Director, Refineries	Internal	Senior manager of largest refinery	sanjay@globaloil.com
Debra	Consultant	External	Project manager	debra@gmail.com
Suppliers	Suppliers	External	Supply software	suppliers@gmail.com

Identifying Project Stakeholders

After identifying key project stakeholders, you can use the power/interest grid to group stakeholders based on their level of authority (power) and their level of concern (interest) for project

outcomes





Take home work

Write a briefing about the Importance of Project Planning