Project Management

Operations and Projects ***differ*** primarily in that **operations** are ***ongoing*** and ***repetitive*** while **projects** are ***temporary*** and ***unique***.

A project can thus be ***defined*** in terms of its ***distinctive characteristics*** – a project is a ***temporary*** endeavour undertaken to create a ***unique*** product or service. **Temporary**, means that every project has definite beginning and a definite end. **Unique**, means that the product or service is different in some distinguishing way from all similar product or services.

Temporary : means that every project has a definite ***beginning*** and definite ***end***. Temporary does not necessarily mean short. ***Projects are not ongoing efforts***

In addition, temporary does not generally apply to the product or service created by the project. Most projects are undertaken to create a lasting result.

Many undertakings are temporary in the sense that they will end at some point. EG assembly operations at an automotive plant will eventually be discontinued & the plant decommissioned. Projects are ***fundamentally different*** because the project ceases when its ***declared objectives*** have been ***attained***, while non-project undertakings adopt a new set of objectives and continue to work.

The temporary nature of projects may apply to other aspects: :

- ***opportunity / market window can be short***.
- ***project team seldom outlives the project*** – most projects are performed by a team created soley to execute the project. o/c, team is disbanded & members reassigned when the project is complete. **ASSEMBLE / DISASSEMBLE TEAM**

Unique Product or Service : means that Projects involve doing something which has not been done before and which is, therefore, ***unique***. A product or service may be unique if the category it belongs to is large. EG thousands of office buildings have been developed, but each individual facility is unique – different owner, different design, different location, different contractors, and so on. The presence of repetitive elements does not change the fundamental uniqueness of the overall effort. For example:

- A project to develop a new commercial airliner may require multiple prototypes
- A project to bring a new drug to the market may require thousands of doses of the drug to support clinical trials
- A real state development project may include hundreds of individual units.

Because the product of each project is unique, the characteristics that distinguish the product or service must be progressively elaborated. Progressively means "proceeding in steps; continuing steadily by increments" while elaborated means "worked out with care and detail; developed thoroughly".

Projects are undertaken at ***all levels*** of the organisation. They may involve 1 or 1000 people or hours. Projects may involve a single unit of organisation or may cross organisational boundaries as in joint ventures and partnering. Projects are often critical components of the performing organisation's business strategy. eg: ***Developing a new product or service ; Effecting a change in structure, staffing, or style of an organisation***

Why is it needed?

▪ manage risk / time ▪ manage budget ▪ manage resources ▪ manage stakeholder expectation

London Ambulance Management - £1.5m failure ; Channel tunnel - £5bn overspend ; 80% of all IS projects are late

Existing Approach

➔ The existing or traditional approach is based on the computational planning and control models originating in large projects from the 1950s onwards, and used extensively by many traditional project industries, predominantly contractors to the aerospace, defence and large construction. The models are highly deterministic and based on techniques — notably PERT(Performance Evaluation & Review Techniques).

➔ Whilst these models have been ***refined*** significantly over the years, they are not considered useful by a large number of world-class organisations. EG approach taken by the Japanese automotive firms in their ***new product development projects*** and these methods and approaches are nowhere to be seen Whilst wholesale adoption of Japanese working practices is not being advocated here, the methods of Toyota in are worthy of study, particularly as they are so different from traditional project management.

➔ Given that many of the ***current business needs*** more closely resemble that of Toyota, operating in saturated, hyper-competitive fast-moving global markets rather than that of the ***cost-plus*** defence contractors of yore, it is only appropriate that project management be re-considered.

Change Drivers
- ***increased competition***
- ***market saturation***
- ***increased complexity***
- ***customer expectations***

BUT – inertia to change / lack of learning / lack of ownership @ Project Management knowledge

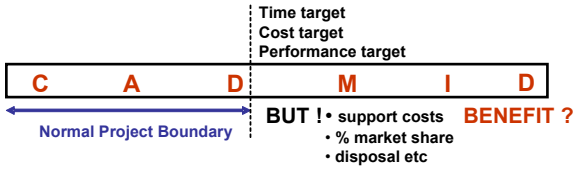
➔ In addition to the project ***context*** having radically changed, there is even some doubt as to whether the traditional methods are ***effective*** in many sectors.

Problems

1. Focus on conformity
- not performance
- must consider **BENEFITS**

2. Complexity
- difficult to get accurate assessments
- trust can be lacking

3. Assessment



4. Tend to talk about FAILURES not success
- Dome
- Channel Tunnel

5. Inability to Learn
- no transfer of information / knowledge
- few systems in place for feedback / LFE
- senior staff not retained with project

Why are other areas (like Operations) doing better?

➜ No Learning

The traditional view is that projects are unique, therefore people don't bother to learn from them, even thought some of the mistakes occur repeatedly.

Many repetitive operations have improved their performance significantly over the past 20 years. In parts of the automotive supply, electronics and retail sectors, it is now common for deliveries to be demanded within a very limited time period, at a cost that decreases year by year, and with a level of quality that is expressed in Parts Per Million (PPM). Indeed, there was a lot of X-pollination between the car manufacturers ~ people wanted to find out / learn / apply. Projects tend to be more insular with parochial views dictating future approaches.

Project management have changed little over this 20-year period. Unlike operations' rapid improvement, the problems of projects seem to be repetitive. ***'Ready Aim Fire' approach / It's all in my HEAD / never worked before***

➜ Role of strategy

Project failure shows that the lack of a clear strategy is a root cause of failure. **80%** of all problems at the project level are caused by failures at a board level in firms to provide clear policy and priorities.

➜ Units of assessment:

Project systems are geared towards assuring conformance to ***budget, scope and time constraints***.
Higher level considerations such as the need for excellence, continuous improvement and achieving customer delight are seen to be outside the scope of the project manager.
This is a major weakness and one that is similar to the manufacturing management approaches to quality management of the 1960s, where the emphasis was on quality control and conformance to standard/specification.

➜ Manufacturing or service paradigms

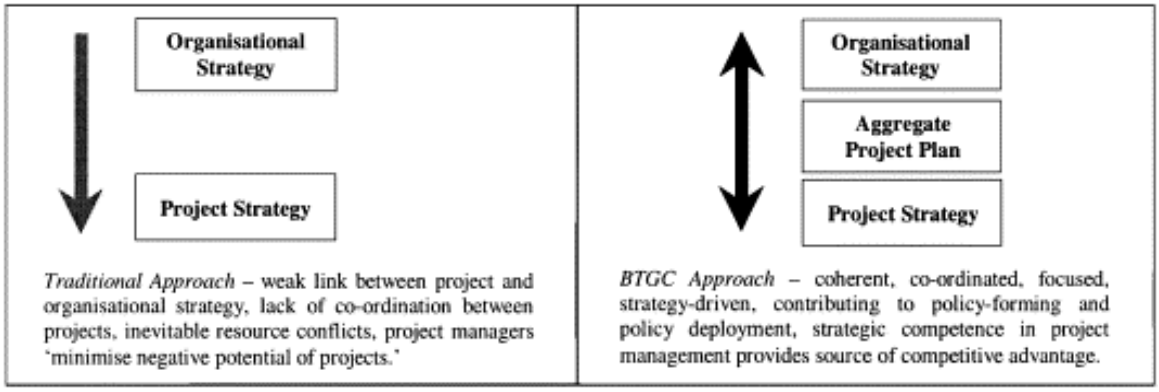
Quality is definable through a precisely measurable set of characteristics.
The modern project environment requires a much higher degree of customer orientation, considering management of both perceptions and expectations

➜ The planning process

Scheduling and inventory control were key issues in the operations management. In project management, the traditional approach is focused primarily on detailed network scheduling approaches for project planning, which require increasingly complex tools and techniques to optimise. Over-relance on technological tools / smart presentational tools.

What can be Done ?

- ➜ Better system for feedback & retaining knowledge ~ identify clear 'ownership' ; contingent body of knowledge
- ➜ Get at the 'root' cause ~ drill down (5– why's? ; Fishbone ; 7S's)
- ➜ Improve the Planning Process & underlying processes
- ➜ Clearly defined METRICS ~ not just time / cost / performance
- ➜ Align the Strategy & Policy :



BTGC ~ Beyond The GANTT Chart

Perhaps we need a fundamental re-think

SYNTECH CASE STUDY