4.0 CRITICAL CHANGE IN PROJECT MANAGEMENT

4.1 Why should there be need other methods for Project Management to replace or change?

Given the level of project failures, there is the needs to find the courses and provide solutions that has significant economic importance.

The first step is to identify the problems that individuals or organisations are facing. So, what are the problems?
4.2 The Effects

Projects that run late, over budget or fail to meet the key needs of their stakeholders course considerable problems for businesses, government and individuals.

A simple basic analysis suggests that either the methods being used for project management or their application or both must be at fault.

So, the problems that we see regularly happening that the projects contain fundamental uncertainties- may be related to the process or what we achieve, where they are normally very challenging.
4.3 The Causes

The reasons:

a) we must first understand the techniques themselves for the shortcomings of the techniques and search for the potential solutions.

b) many organisations still require the use of the original techniques.

So, the techniques require some justifications as follows:

- All goals are based on estimates which contain uncertainties. The reality is that activities will sometimes run late and never early.

- Estimates of activity times generally include a large safety margin but it does not help in achieving on time of completion.

- Network diagram or cash flow chart. Normally, with a latest start time for activities are becoming more critical. The more critical paths in a project the greater the chance of failing to meet time goals, the less chance of ‘focus’ by the Project Manager.
By this method of scheduling activities, the situation arises where there are parallel of activities, the biggest delay is passed on to the subsequent activities.

Sometimes, we measure progress is in error. By the time the Project Manager is notified of a problem, it is already too late to prevent it having an impact. All these while, we notified the progress is satisfactory.

It is usual in business projects all have multi-tasks. Everybody in the team has many tasks ongoing at any one time.

Where most people were given extra time to do works, now it is all wasted at the front-end.
**Figure 4.1 The Effect of Multi Tasking**

<table>
<thead>
<tr>
<th>Project A</th>
<th>10 days</th>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Project B</td>
<td>10 days</td>
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<tr>
<td>Project C</td>
<td>10 days</td>
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<tr>
<td>Project A</td>
<td>20 days</td>
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<td>Project B</td>
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4.4 **BACKGROUND TO A POSSIBLE SOLUTION (TOC)**

The **Theory of Constraint (TOC)** was the result of the application of a structured logic approach to the problems of a manufacturing environment. A fundamental of this is to manage systems by focusing on the constraint/bottleneck.

The importance of the constraint is that it determines the ability of the system to do work and thereby earn revenue. This focus on the throughput is the factor that differentiated it from other inventory control ideas at the same time.
The stages of the TOC approach are as follows:

- Identify the constraint-the critical path and the critical resources,
- Exploit the system constraint,
- Subordinate everything else to the constraint,
- Elevate the constraint,
- Go back and find new constraints, repeating the process.
4.5 **APPLICATION OF TOC TO PROJECT MANAGEMENT**

The above steps applied to project as follows:

The constraints include

- The critical path of the project-policy of firm,
- The resources that are on critical paths of one or more projects,
- Dates that are fixed into schedule and cannot be moved.
4.6 **ESTIMATES**

The principles:
- Estimate both from initial to finish.
- Safety at the end of critical path.
- Time plan by giving regular updates on.
- Progress be monitored.

4.7 **Controlling Projects**

Project Manager has the ultimate responsibility for control the project. To gain benefits from the early finish.
THANK YOU