



Major Construction and Infrastructure Projects

Recommendations on Cost and Schedule performance improvement together with Risk reduction for Major Projects

It is often very helpful to carry out a project review of other similar projects prior to embarking on a major project. Reviewing other similar projects in detail can provide some very valuable insights into where the project was particularly successful as well as where it did not go so well or where issues and risks were encountered and what they were.

A project analysis of other projects can significantly help in the production of the overall project schedule as well as help in the reduction of risk. This can contribute to the project cost in a beneficial way.

The benefits of a project analysis study either at the beginning or early on in a project life cycle can be very beneficial to both cost and schedule. It is important however to focus on similar projects in respect to size, complexity, geographic location and so on. Not necessarily from the within the same industry but with the same characteristics. It is also important not to confuse by reviewing too many projects that may be held in a database as often these are not of a similar enough profile to provide meaningful data.

It is very important to choose the correct projects when doing any comparison in order to maximise the data available and hence the potential benefits.

In the first instance it is necessary to fully understand the project for which the study is being used as a means of improving. It is then necessary to identify several similar projects that have been implemented for the subject of analysis. The importance of the benchmarking process is key to this analysis and should include:

- Basis of comparison
- Procedures and Methodologies
- Estimating and Cost Analysis
- Workscope Definition
- Detailed Project Planning
- Tracking and Remedial Action Capability
- Metrics & Gap Analysis
- Project Component Analysis and Effect
- Schedule Milestones
- Common Risks and Issues
- Project Drivers
- Management and Approach
- Front End Loading & Key Resources

- Regulatory & Environmental
- Technology
- Geographic Location
- Macro Economics & Infrastructure
- Difficulties & Parties Involved
- Large Project/Mega Project Characteristics
- Interfaces and Interdependencies
- Contract and Procurement Philosophy
- Best Practice

Any review must be done by an independent party with the necessary expertise in project analysis as well as significant experience in similar project implementations.

Estimating, Cost and Schedule are key elements in any project. The precursor to the schedule is the workscope definition. Get any of these badly wrong and the project is in trouble. Accurate detailed cost and scheduling based upon sound and comprehensive workscope definition and good estimates forms the bedrock of any project, without these components the project is on quicksand and will quickly and easily get into difficulty.

At Chaucer Consulting we have developed a process and methodology for the review and assessment of major projects for the specific purpose of identifying potential cost and schedule performance improvement as well as risk reduction:

Why the Chaucer Project Diagnostic®

- ▶ The Chaucer Project Diagnostic® is based upon our world-wide, cross industry project management experience underpinned by our own proven project management methodology – The Chaucer Way®
 - ▶ Experienced project management consultants involved in major international projects and programmes.
 - ▶ A variety of tools and techniques including a project management audit process which is core to Chaucer's diagnostic approach.
 - ▶ Database of project information on a variety of complex projects covering a wide geographic distribution.
 - ▶ Tailored approach to suit client specific needs and to reflect the prevailing macroeconomic market circumstances.
 - ▶ Unique expertise in project comparison analysis.
 - ▶ Ability to benchmark current project management activities against The Chaucer Way®.
- ▶ Our approach has been used on more than 3000 projects in the following areas:

Oil and Gas E&P Projects: <ul style="list-style-type: none"> ▶ Offshore ▶ Onshore ▶ Pipelines ▶ Terminals 	Infrastructure/Construction Projects: <ul style="list-style-type: none"> ▶ Tunnels, Bridges & Buildings ▶ Railways ▶ Water ▶ Airports 	Power Generation Projects: <ul style="list-style-type: none"> ▶ Gas ▶ Hydroelectric ▶ Nuclear ▶ Alternative Energy
Process Plants: <ul style="list-style-type: none"> ▶ Refineries ▶ Basic Industries ▶ Chemicals ▶ Food 	Aerospace and Manufacturing: <ul style="list-style-type: none"> ▶ Aircraft ▶ Shipbuilding ▶ Car Plants ▶ Automated Factories 	Non Engineering / Construction Projects: <ul style="list-style-type: none"> ▶ Information Technology ▶ Business Transformation ▶ Organisational Change ▶ Merger & Acquisition

