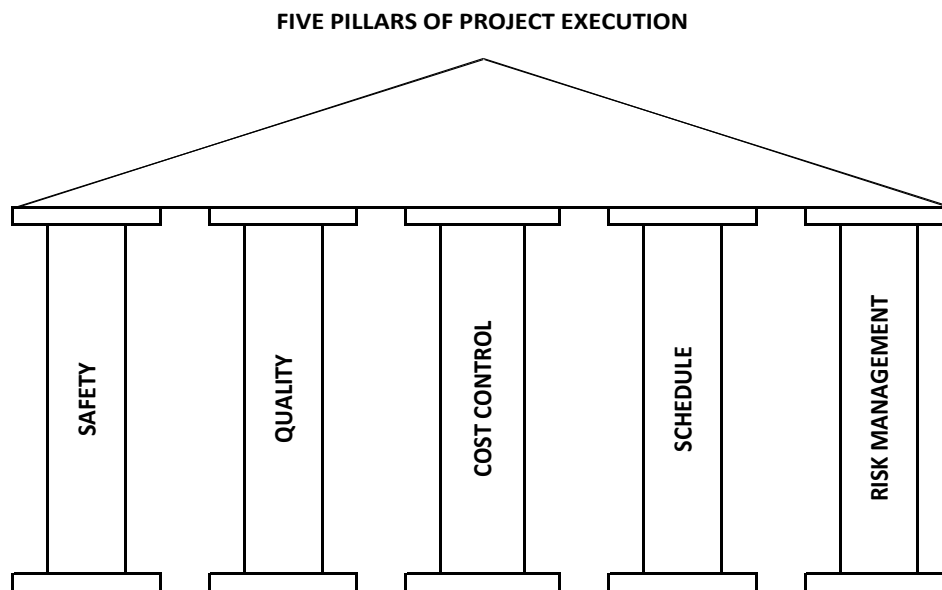


PROJECT EXECUTION – PLANNING FOR SUCCESS

My last position in the Oil and Gas Industry was Manager of Capital Projects. I began the position with the enthusiasm of a new college graduate. Understanding that this would be my last position encouraged me to ‘give back’ to the industry, in a small way, all that I learned during my 40+ year career. My first goal, simply stated, was to implement a Capital Project Gated Process to facilitate consistent project execution. Gone were the days of “Get ‘er done” and only then finalize the cost at project close-out. Times were changing and cost control was at the project forefront. My second goal was to document the Five Pillars of project execution, which support project execution excellence; namely, Safety, Quality, Cost Control, Schedule and Risk Management.



During development of my book, one objective was to keep the chapters concise and on point – *keep it simple* - such that a new or experienced engineer could better understand and utilize the concepts of project execution. More importantly, the book does not collect dust on an engineer’s bookcase. Each section of the book is brief with references to Figures, Exhibits and Examples, affording the reader reference documents that are available and can be used as a ‘go-by’ on their current or future projects.



REFINERY PROFITABILITY...WHAT'S IN IT FOR STAKEHOLDERS

Refineries exist to support their various Stakeholders by providing quality refined hydrocarbon products, which can either be used internally or sold into the retail market. There is competition between Operations, Maintenance and Capital Projects for each discretionary dollar spent in support of the refinery. Similarly, Capital funding is shared between Regulatory, Maintainability and Discretionary projects (typically require economics to support Authorization For Expenditure AFE funding request). If refineries are to continue to improve their profitability over time, they must continually improve their competitive position in the marketplace. Failure to do so will result in reduced funding for Capital Projects.

Simply stated, the manner in which Capital projects are executed has a direct correlation on the future of refining.

How does a refinery compete in a world market? Can they maintain their competitive advantage by executing the Five Pillars of Project Execution better than their competitors? I believe the answer is 'yes'.

The goal of the Capital Projects Group is to execute projects using the five pillars of execution:

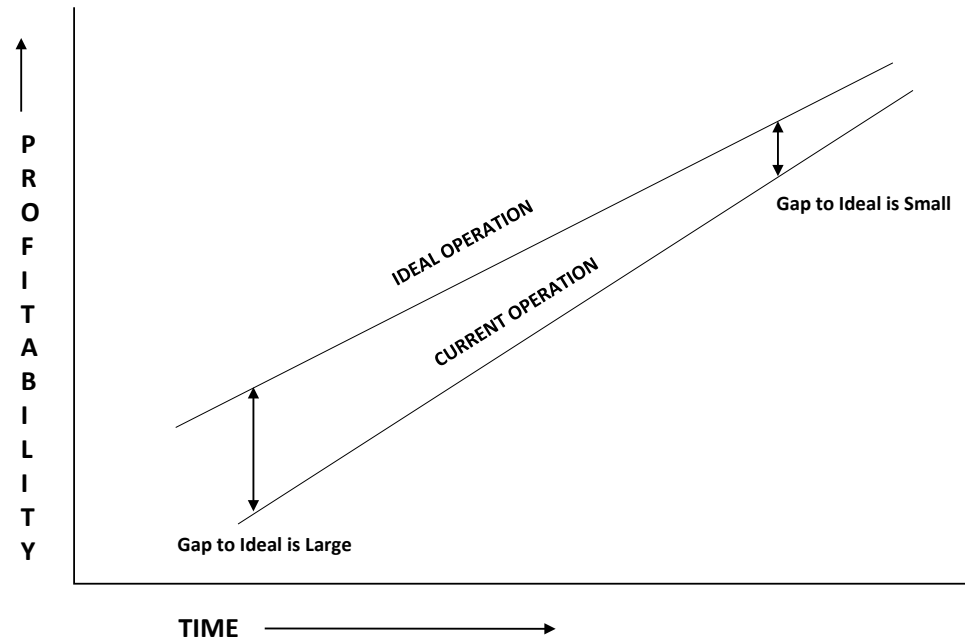
- Cost effective and within the approved Budget;
- Safely implemented and completed with no Lost Time Incidents;
- Deliver a Quality Project to our three Customers that they are proud to operate (Operations, Maintenance and Safety)
- Schedule is achieved and on-time; and,
- Mitigate project risks throughout project execution.

Failure in any one of these five areas will affect the refineries profitability.

I quote Jimbo Fisher, the former head football coach for Texas A&M, “Every time you touch the football it is for a National Championship.” Likewise, every activity performed during capital project execution should be completed with the goal to improve the refineries profitability.

Figure 1.1 compares the relationship between the “Ideal Refinery Operation” and our “Current Plant Operation” charting profitability over time. Our goal should be to identify the “Ideal Operation” and work to “close the gap” between our current position and the Ideal position. The challenge is that since the Ideal position is constantly improving over time, we must continually improve over time. If we choose not to improve, we will lose our market position and Customers who buy our refined products.

Company Profitability versus Time



**The Goal is to 'Close the Gap' between
the Ideal Operation and the Current Operation**

FIGURE 1.1