Dar Al Riyadh Insights reflect the knowledge and experience of our Board, executives and staff in leading and providing PMC, design and construction management services. Dar Al Riyadh believes in the importance of broadly sharing knowledge with our clients and staff to improve project outcomes for the benefit of the Kingdom of Saudi Arabia.

Large complex projects require strong foundations if they are to be successful. Arguably, these are the same foundations any project would require but experience suggests otherwise. When we look at recurrent weaknesses in foundations for success of large complex projects we see several recurring themes.

This Insight looks at two additional areas of weaknesses.

Constraint coupling

Inadequate identification of constraint coupling. Think of this as second or third order coupling that is present, not easily visible in "complexity", and that can result in non-critical path activities without direct critical path dependencies, impacting critical path performance.

A key factor in understanding the risks associated with complexity involves understanding and assessing the various types of coupling to which a project is susceptible. Tight coupling, for example, creates new risks in large scale projects. This action is not yet adequately understood or managed. More traditionally sized projects, by contrast, are less susceptible. Coupling in large complex projects can be classified, and strategies implemented to better manage.

Inadequate decision frameworks

Many large complex projects face growing organizational complexity with clouded accountabilities. Leaders are less able to delegate decisions cleanly, and the number of decision makers has risen. The reduced cost of communications brought on by the digital age has compounded matters by bringing more people into the flow via email, Slack, and internal knowledge-sharing platforms, without clarifying decision-making authority. The result is too many meetings and email threads with too little high-quality dialogue as executives ricochet between boredom and disengagement, paralysis, and anxiety. All this is a recipe for poor decisions.