

## EPC(M) vs. Integrated Technology Module Provider (ITMP)

Not all projects are created equal. Emerging project management currently has two prevalent approaches based on the project type: EPC(M) and ITMP.

In an EPC or EPCM one firm is hired to complete the engineering, procurement, and either the construction with internal resources or the construction management with construction itself completed with external resources. In rip and reapply projects with no risk, an owner can elect to passively lead an EPC(M) on their own. In projects with technology risk, large investments, or fast paced schedules the owner needs an Owner's Representative to actively drive the EPC(M).

An Integrated Technology Module Provider (ITMP) is comprised of a team of world-class TMPs with an experienced Owner's Representative orchestrating the overall multi-organizational project integration. TMPs commonly design and build and deliver systems meeting design basis performance requirements.

	<b>EPC(M) without an Owner's Rep</b>	<b>Owner's Rep Lead ITMP</b>
<b>Attitude</b>	Traditional – Established pace, segmented tasks, hand off between players, and hierarchical approach.	Entrepreneurial – Less people, deliverable focused work, nimble pace, and adaptable to change while driving schedule.
<b>Owner Defined Scope</b>	The owner must be in a position to clearly define scope. – Many times EPC(M) firms will bid low knowing that they will make money on scope change orders.	Owner's Rep works with owner to define scope and fill holes. – Owner's Reps with development arm can lead development scale up to mitigate commercialization risk.
<b>People</b>	Staff members of EPC(M) firm will be selected from a pool and team members will be added from internal or external resources as scope increases. – Team selection typically based on availability not technical excellence.	TMPs will be selected by Owner's Rep based on their world-class capabilities in the area they will be working. – Team members have sharp technical acumen in their area. – External experts engage as needed.
<b>Leadership and Accountability</b>	Internal leadership team with hierarchical approach. – Issues are handled in-house and are sometimes hidden from the owner until they impact the schedule.	Owner's rep must lead multiple teams and each TMP has their own leaders. – Single point accountability tracks completion and quickly exposes and addresses issues.
<b>Engineering Design and Equipment Consistency</b>	EPC(M) firm does all the engineering in house so all the details should be consistent throughout. – Teams do not always communicate and one firm does not guarantee consistency from team to team.	Working with multiple TMPs the Owner's Rep must make a specific effort to drive consistency. – Utilize Design Basis documents, clearly communicated expectations, and regular review points.
<b>Procurement Markups</b>	Procurement markups of (20-40%) can be buried and hidden from owner.	Owner's Rep requires TMPs to line item any procurement markups.
<b>Schedule</b>	EPC(M) has overall project schedule responsibility. – Teams get sloppy and allow schedule slip when they know other internal teams are slipping.	TMPs have block focused delivery of their own design build modules. – TMPs have healthy competition to deliver their system preventing complacency.