

Mega Project Success Factors



Sue Dyer

Very large “Mega Projects” tend to create their own “weather”. There is so much opportunity for chaos to break out that some experts believe it is not possible to control the inevitable chaos. This chaos has played out in many notable projects over the past few years. These include the failure of the Denver International Airport project, the Hong Kong Airport project, the Boston Artery (Big Dig) project and now the San Francisco Bay Bridge project to come in on-time and within budget. Failures like these are of such high concern that Congress passed new requirements for managing and overseeing mega projects (Congress defined a mega project as \$1 billion or more, while others define it at \$250 million and above).

As facilitators who have worked on over 3,000 construction projects, including dozens of large and mega projects, Sue Dyer and her team at OrgMetrics LLC began to see certain patterns emerge. Ms. Dyer explained, “We are always looking for what makes a project, and in particular a mega project, succeed. We watched for those factors that were consistent on successful projects, and absent on projects that failed. Over time patterns emerged. So far, eleven success factors have been identified.”

These eleven *mega project success factors* evolved from personal experiences and observations over many years and many projects. While these factors can’t cover all aspects for success, it is hoped that they open the door to understanding some of the key aspects required for success and the nature of mega projects. With such understanding we can begin to know why and how to approach megaprojects differently.

Even though the success factors were developed from experiences on construction projects, it is believed that similar dynamics emerge within all types of large and megaprojects.

The best way to use the Mega Project Success Factors assessment is as a communication tool. Pass it out to your team members and have them complete it. Then compare what each one has identified as a project weaknesses. I’ve seen mega projects with just one severe weakness get sunk as that same weakness played out over the life of the project.

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MEGA PROJECT SUCCESS FACTORS							
Indicate (circle) your score for each Mega Project Success Factor							
1 = Very Poor 2 = Needs Improvement 3 = Satisfactory 4 = Strong 5 = Very Strong							
1	Leader/Owner	There is a person who is identified with the program/project as its leader. This person has full authority to do whatever they feel is necessary for success. The leader surrounds themselves with a group of the best of the best to help execute the project/program.	1	2	3	4	5
2	Mega Project Expert	There is someone on the project with several successful mega projects under their belt. They are in a leadership role, from the beginning to the end of the project/program.	1	2	3	4	5
3	Committed and Integrated Team	Individuals are personally committed to the success of the project (a quality project, on-time and budget). The people are handpicked for their LEADERSHIP, experience/expertise and willingness to do whatever it takes. No one can tell who are consultants and who are employees.	1	2	3	4	5
4	Run by Project Managers (not politicians)	When design and construction issues get politicized, practicality and common sense are not available to the team. The project needs a motto of “let the experts use their expertise.” The political issues should have been dealt with by the time of schematic design and should not be a part of construction.	1	2	3	4	5
5	Unique Structure and Culture (new norms, policies, procedures)	Pulled out and away from the normal routines of their respective organizations, the project team members are free (empowered) to set new norms, policies and procedures that they feel are needed for success. The systems and mental attitude that can complete a \$10 million project are not the same as those for a billion dollar one. The project/program structure should enable the team, not stifle its ability to be successful.	1	2	3	4	5
6	A Program Approach	A program of projects is highly inter-related. It is not the same as one large stand-alone project and it cannot succeed by using the tools developed for managing a project. A new approach is necessary. This means there needs to be new systems, procedures and tools that allow you to manage a program of projects rather than managing project by project.	1	2	3	4	5
7	An Atmosphere of Partnership	Everyone must work together toward the common end: a successful project. There cannot be any “CYA” or “us vs. them” - if there is you are likely to fail. Without an atmosphere of true partnership communication will be poor, resulting in team members and team leaders being unaware of project issues and problems until it is too late to solve them in a timely manner. This can work to sink the project. When people are pointing fingers, either to take the heat off themselves or to place blame, the focus is taken off of the project (and off of solving the problem) and placed on protecting interests. This will assure project failure.	1	2	3	4	5
8	Expect Chaos	When NASA sends a rocket to Mars it is on target only about 5% of the time. The other 95% of the time it is making corrections to come back on target, gyroing back-and-forth. It is the team and team leaders who assure that the project stays focused on “Mars” (project success). First you must have the right people who can tell when the project is off course, and who are willing and able to tell you. Then, there must be a system in place that allows a “course correction” to get you back on target.	1	2	3	4	5
9	Provide Account-Ability	Successful projects have a culture and systems for holding team members accountable for their commitments and pieces of the project. The heart of Account-Ability is a monthly independent feedback system.	1	2	3	4	5
10	Integrated Activation Team (facilities)	A major facility project is not a turnkey operation. There have been several notable failures due to the staff’s inability to operate the new systems incorporated into the facility. An integrated activation effort must be started early in the construction phase to achieve buy-in and acceptance of those who will run and maintain the new facility.	1	2	3	4	5
11	Integrated Passive and Active IT (facilities)	Successful projects incorporate information technology systems, both passive and active, from design through construction. Late incorporation of either passive and active IT can be devastating to a project’s schedule, particularly when IT specialists need to be supervised while accessing secure job sites.	1	2	3	4	5

Strengths Circle those factors where you scored a 4 or 5 These are you strengths	Weaknesses Circle those factors where you scored a 1 or 2 These are you weaknesses
<ol style="list-style-type: none"> 1. Leader/Owner 2. Mega Project Expert 3. Committed and Integrated Team 4. Run by Project Managers 5. Unique Structure and Culture 6. A Program Approach 7. An Atmosphere of Partnering 8. Expect Chaos 9. Provide Account-Ability 10. Integrated Activation Team (facilities only) 11. Integrated Passive & Active IT (facilities only) 	<ol style="list-style-type: none"> 1. Leader/Owner 2. Mega Project Expert 3. Committed and Integrated Team 4. Run by Project Managers 5. Unique Structure and Culture 6. A Program Approach 7. An Atmosphere of Partnering 8. Expect Chaos 9. Provide Account-Ability 10. Integrated Activation Team (facilities only) 11. Integrated Passive & Active IT (facilities only)

Scoring Your Mega Project Success Factor Assessment

By using the Mega Project Success Factor assessment you can quickly see what your project has going for it, and what is going against it. Then you'll know where you need to make improvements.

After reading through and rating the eleven factors (#10 and #11 are for buildings only), identify those factors where you scored a 4 or 5 and circle them as project strengths. Next, identify those factors where you scored a 1 or 2 and circle them as project weaknesses. Factors that scored a 3 are probably OK, but certainly have room for improvement.

Now, for each factor that is a weaknesses, determine what you can do to improve that aspect of your project - especially now that you know it is a critical risk to your success. Bring these factors up at project meetings and get the team members talking about what they are going to do to either improve the factor(s) or minimize its negative effect on the project.

For those factors that are current strengths, think about how you might use them to take your project from good to great. While it is important to shore up your weaknesses, by only focusing on improving your weaknesses your project can only become good. It is by building on your strengths that you can really take your project to the next level and assure success. Talk to others on the project and get their ideas and commitment to build on your strengths.

Large/mega projects must be managed by the cohesion created through having a common vision and goals. Over the next months work with your team to create a plan to improve both your weaknesses and strengths - then implement the plan.

Sue Dyer is President of OrgMetrics LLC and host of Construction Dream Team podcast, where she interviews industry leaders and experts about the people side of construction so you can build your dream team. Sue and her team have worked with over 3,000 construction project teams and have seen what works and doesn't work to create high performing project teams. To learn more please visit ConstructionDreamTeam.com or OrgMet.com. Sue would love to hear from you and answer your questions. Just use the contact us form on either website.



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