A Tiered Approach To Implement the *PMBOK® Guide*

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Organizations commonly struggle with how much effort to put into project management based on the size of the project. It is important to deploy enough rigor/processes to effectively manage a project, but it is also important not to deploy too many and cause unnecessary work and frustration. This article proposes a tiered approach for implementing the project management processes in the Guide to the Project Management Body of Knowledge (PMBOK® Guide). *Following this approach is likely to help organizations get started with tailoring the* PMBOK® Guide *to the size, duration, and complexity of their projects. If you want to learn more about the most common tier, you can attend our "Do More With Less" training; find out more about this course and other courses we offer on our* Trainings *page.*

Last year, we conducted a survey of project managers and found that nearly 75 percent of respondents felt that project management is becoming more difficult (PM Survey, 2014). With the perceived difficulty of project management increasing, how do organizations decide what project management processes to execute on any given project? A common struggle is "finding the sweet spot," where the resources devoted to project management are enough to provide the greatest value toward successful project delivery but not so much that they needlessly consume resources and time.

In past articles and blog posts, we have suggested eight project management processes that, if used on any project, will greatly increase the chance of success. The projects where these eight processes work best fit within a spectrum based on the project duration, number of team members, and amount of effort contained. For larger projects, more processes might be needed—but which processes? And what is the cutoff point determining when more processes are needed?

In this article, we suggest three tiers of project management based on project size, duration, and number of team members. For each tier, we also suggest what processes need to be implemented to maximize the risk reduction and chances of project success.

Small Tier/Fast Track Projects

The small tier is for one to two full-time people, working on 1-2 smaller size projects, where the duration may be more easily measured in weeks rather than months. Small projects tend to last between two and ten weeks and usually have low complexity. They might also be referred to as "fast track" projects because they can be done quickly with a few people.

For small tier or fast-track projects, we find there are only a few project management processes that most likely will provide enough rigor that is needed for successful project delivery. The processes recommended for this tier are:

1. Project Charter
2. Stakeholder Analysis
3. Project Schedule
4. Communication Plan

Many other processes can be executed at the high-level and their results can stay within the project charter. For example, high-level scope, budget, and risks can be kept within the project charter. Every project needs a charter, and stakeholders will expect every project to have a schedule. Stakeholder analysis should always be performed in order to get a full picture of who is for or against the project and who can provide resources. Along with the stakeholder register, the communication plan is vital to make sure that all stakeholders and team members are receiving the information they need.

Medium Tier /Medium to High Complexity

The medium tier expands the number of processes and is better suited for more complex projects or a larger number of projects in a portfolio or program. The medium tier is ideal for project managers overseeing 2-6 medium-sized projects, with durations of 4-12 months and 4-8 full-time team members involved. The total length of the projects would likely be less than 200 person-months per year. For readers who have followed our Eight Powerful Project Management Processes blog series, the list of processes we recommend for the medium tier will look familiar:

1. Project Charter
2. Stakeholder Analysis
3. Work Breakdown Structure (WBS)
4. Resource Allocation
5. Project Schedule
6. Communication Plan
7. Risk Register
8. Performance Reporting

The processes suggested in the medium tier are to help project managers handle the increasing complexity of the projects. Because of the quantity and complexity of projects, resource allocation is recommended, and a WBS should be created for each project to ensure that everyone is on the same

page regarding scope and requirements. Having the work packages from the WBS also helps in allocating resources and creating the schedule. Also due to the complexity, each project should have its own risk register and it should be updated on a regular basis. With the complexity and quantity of projects, stakeholders are likely to have different communication needs, so performance reporting becomes more important as well.

Large Tier/High Complexity*
The large tier includes large to very large projects, typically of higher quantity, and typically very complex. Project durations might range from 6 to 15 months or more and involve 6-10 full-time team members or more, and a project manager might oversee anywhere from 6 to 10 such projects at a time. Person-month effort might be closer to 600 person-months or more. In addition to the eight processes from the medium tier, the following 9 processes should also be used on these projects, bringing the total to 17 processes:

1. Scope Statement
2. Requirements Traceability Matrix
3. Project Estimation
4. Project Cost
5. Quality Metrics
6. Risk Quantitative Analysis
7. Earned Value Management / Variance Analysis
8. Change Management
9. Lessons Learned

With large-sized projects, complexity increases. Therefore, more processes are crucial. In projects with larger scope, the scope statement enables teams to minimize rework due to missing, incomplete, or misinterpreted requirements. The requirements traceability matrix enables project managers to connect requirements to the team members working on them. When projects produce more deliverables, and the deliverables are more complex, cost control becomes more important to prevent overruns. Quality metrics are also necessary to minimize defects. It is also more important to further develop risk tracking and forecasting. Risk quantitative analysis enables project managers to develop better impact estimates for the risk register, and Earned Value Management (EVM) helps them track current progress and forecast future results.

*Projects larger or more highly complex than the large tier may require additional rigor to adequately manage.

The following tables summarize the project fit level and processes for each tier:

Table 1: Project Fitness Level

Tier	Number of Projects	Size / Complexity	Full-Time Team Members	Duration	Effort (Person months)	Number of Processes
Small	1-2	Small	1-2	2-10 wks.	Up to 50	4
Medium	2-6	Medium	4-8	4-12 mos.	Up to 200	8
Large	Over 6	Large	Over 10	Over 10 mos.	Over 600	17

Table 2: Processes by Tier

Process	Small	Medium	Large
Project Charter	✓	✓	✓
Stakeholder Analysis	✓	✓	✓
Project Schedule	✓	✓	✓
Communication Plan	✓	✓	✓
Work Breakdown Structure	×	✓	✓
Resource Allocation	×	✓	✓
Risk Register	×	✓	✓
Performance Reporting	×	✓	✓
Scope Statement	×	×	✓
Requirements Traceability Matrix	×	×	✓
Project Estimation	×	×	✓
Project Cost	×	×	✓
Quality Metrics	×	×	✓
Risk Quantitative Analysis	×	×	✓
Earned Value Management	×	×	✓
Change Management	×	×	✓
Lessons Learned	×	×	✓

Change Management, Procurement Management, and Vendor Management

Some projects have special requirements that will fit outside this tiered structure, and therefore will need additional rigor. Change management, procurement management, and vendor management are three examples of processes that may need to be executed at any tier. Change management may be needed in the small or medium tier if the scope is prone to change. Procurement management and vendor management are based on whether procurement or vendor relationships exist. Organizations should develop these processes, even if they aren't used all the time, so they are ready to handle situations requiring procurement relationships, vendor relationships, or a complex or fast-changing scope.

Conclusion

Whatever the size and duration of projects, it is important that organizations apply some degree of project management. If too few project management processes are used, there are too many unnecessary risks through key processes not being covered. If too many are used, the value obtained from project management decreases due to overwork. Following our tiered approach to implementing the *PMBOK® Guide* should help any organization establish a baseline for its own projects. Through practice, there may be additional refinements based on individual organizations' needs. Practicing and refining this approach should help any organization reach its project management "sweet spot," or the point at which it is executing an appropriate number of project management processes based on project size, complexity, and duration. We are hopeful that finding this "sweet spot" will help organizations address their difficulty in implementing project management processes.

Looking for more knowledge to help you increase your project delivery capability? RefineM offers a variety of training courses in project management topics. Look up our Trainings page for more details.

References

1. PM Survey (2014). Project management support survey (PM Survey). *Survey Monkey,* 2014. https://www.surveymonkey.com/results/SM-RCNSFWM8/