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How to Fight The Trap of Do-It-Yourself Approaches on Large Complex Projects

During our interventions we observe that too often, a default approach to difficulties in project is for project teams to intervene directly, what we call the 'Do-It-Yourself' approach. This observation applies both to owners and contractors. However, the consequences of such an approach are often underestimated. This behaviour frequently results in poor performance, while dramatically increasing the workload and responsibilities of the project team. In this White Paper we explore the reasons for this behaviour and what alternatives should be considered before reverting to this approach.

Why people frequently revert to the 'Do-It-Yourself' approach

Contracting or subcontracting in projects is akin to delegating to a third-party part of the project execution responsibility. As with any delegation of work, this requires some measure of 'letting go' or detachment: work will not be performed exactly the way you would do it, but at the end it will work and be compliant with the expectations. When difficulties arise, it may be tough to just sit there and instruct the person or entity to which you have delegated the work on how to recover; there is a natural tendency to step in and do it yourself. The same psychological syndrome is at work on a larger scale on projects. Some project directors (in particular those that tend to be rather on the micro-control side of the management scale, or those that have held positions in the same specialty as the contractor) will not resist long before stepping in.

This is of course based (on the often incorrect) assumption that the project team is in a better position to do the work than the contractor; this syndrome thus appears more naturally on the assembly and construction project phases than on specialised supply of equipment.

It is amazing how quickly projects tend to revert to the 'do-it yourself' approach, either during execution or even during project definition when it proves difficult to find exactly the right contractors to fit with the expected contracting strategy; often this is decided without even taking the necessary time to consider alternate approaches (using another contractor, increasing the scope of an existing contractor or splitting the work between different contractors).

Consequences of the 'do-it yourself' approach

The Do-It Yourself approach in projects necessarily leads to dealing with a much larger number of smaller contractors and contributors and therefore, setting up the required organisation to coordinate their work. It therefore increases the complexity level that must be managed at the project team level, and the associated requirements in terms of management and control. When this 'do-it-yourself' approach comes up during the definition stage as a way to resolve the contracting strategy, requirements in terms of project team size, competency and tools increase substantially. A significant investment will often be required upfront to enable proper control of the project during this execution. This will necessarily involve delays before the project team can be setup properly. This additional cost and investment requirement is not always understood and taken into account, resulting in projects that start-up without the required control framework.

When the 'do-it yourself' approach unexpectedly appears during execution as a solution to difficulties encountered by a contractor, the additional workload on the project team is also often underestimated. A sudden expansion of the project team will be required to deal with the increased coordination and complexity, both in the project office and on the worksite. In addition, that part of the project may need to be managed somewhat independently from the rest, as a task-force, to avoid polluting the rest of the project execution. All those aspects are often not considered when opting for he 'do-it yourself' approach, resulting in team confusion and exhaustion due to the additional workload. Sometimes the systems for controlling the project are not adapted and become quickly overwhelmed, for example in terms of reactivity for issuing purchase orders and contracts.

> Opting for the 'do-it yourself' approach without properly considering the consequences at the project team level can lead to difficult situations of loss of control on the project

In summary, opting for the 'do-it yourself' approach without properly considering the consequences at the project team level can lead to difficult situations of loss of control on the project. We observe that projects too often decide to adopt this approach without a proper understanding of the prerequisites and of the time and investment that is required.

Alternatives to the 'Do-It Yourself' approach

A common alternate approach is a semi-Do-It-Yourself approach where a project management contractor (PMC) is tasked with assisting the project management team with the management of the 'do-it-yourself' scope. This helps reinforcing the project team with adequate resources and even sometimes more advanced or more adapted systems. However, in this situation the PMC will often be on a reimbursable basis and any commitment will still officially be borne by the project. Therefore, there is little change to the risk profile of the project. The additional supervision

and monitoring of the PMC and the site supervision requirements still represent additional strain on the main project team. The integration of the PMC processes and systems and the project processes and systems may not be straightforward and may require some investment and anticipation.

Alternatives when there is a particular difficulty with a contractor during project execution include:

Alternatives should be assessed and balanced with the investment needed to successfully apply a Do-it-yourself approach

- Finding ways to influence the contractor's commitment and performance, which can include replacing the contractor's project leadership team and other actions that need to be discussed at governance level.
- Terminating the contract for default of performance and assign it to a competitor with demonstrated experience in executing that scope. While this solution will not come cheap, there are instances where it will still be cheaper and less risky than a straight 'Do-It Yourself' approach. It does happen from time to time in large complex projects.
- De-scoping a particularly difficult scope and giving it to another more specialised contractor. Although this will involve increased interface management it can be an elegant solution when the difficulties are related to a lack of experience or particular technical difficulties that have to be overcome in a certain area of the project.

It is generally recommended to study the possible implementation of one of these solutions before going to the attractive but dangerous Do-It-Yourself approach.

Conclusion

Do-It Yourself approaches provide an illusion of control but on complex endeavours such as large, complex projects, generally fail unless there is a definite experience in dealing with the scope.

In general, a Do-It Yourself approach cannot be improvised, and it takes a robust system and project team to directly manage a multitude of contractors and contributors. Therefore, any consideration of such a project execution mode needs to be carefully assessed and substantial investments made in terms of people, processes and systems. It is generally not a good idea to decide on it suddenly without having carried out careful assessment of alternatives and impacts and made necessary preparations.