Project Trade-offs an Integrated Relationship

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Do you recall the little gel filled rubberized balls found at many grocery and department store checkout stands? Picking one up generated the urge to squeeze forcing the rubber bladder to project out either side of your hand. An astute person would observe that applying pressure to one side of the ball effected another and it took a different shape. This is a great analogy for project trade-offs.

Elements of a project, scope, schedule, risk and costs are all interrelated. Changes to one element affects the others in some way. A project may require change to capitalize on a market strategy. How that change affect the other elements needs to be weighed against potential earned values, costs and goals? Does the change threaten the project objectives? What are the customer's priorities? "It is not realistic to assume that making arbitrary changes to one corner of the project, like the duration, can happen without any compensating effects through the rest of the project" (Billows, 2015).

Project Trade-off Described

When a project sponsor requests a change to the project "successful project managers use trade-offs between scope, schedule, cost, risks and [or] quality when they assess problems and changes to the project plan" (Billows, 2015). When any of the project team or stakeholders make a change request the same steps are used to evaluate and justify acceptance or denial of the request.

Take for example a change in budget, if the budget is decreased something else in the project must also be reduced. That may be the quality or the scope of the project. A change increase in the scope will require an increase in budget, schedule or decrease in quality. Some of that impact may already be coverable by budget reserves. But, by using the budgeted reserve you increase the risk factor of going over budget if things go wrong during the rest of the project.

One of the methodologies for trade-offs is to be prepared for contingencies. “You must build the project plan with quantified measurable outcomes. And the schedule must have work estimates and accurate precedence relationships. Then you can model every change with a compensating trade off” (Billows, 2015). A proactive Project Manager will use qualitative risk and threat analysis and the Analytic Hierarchy Process (AHP) to evaluate the best options to present to the project sponsor as a trade-off. These tool help to focus the conversation on constructive options leaving out those things that will surely be unacceptable to the customer.

“AHP is a method of calibrating preferences for achieving the different objective of a project” (PMI, 2009, p90). Through interviews with the client the PM uses preference factor charts and tables to identify their level of priority between cost, time, scope and quality. Then The PM evaluates the impact of the changes requests against those preferences taking into consideration the risk and threat analysis and presents viable options to the customer based on their own preferences.

Conclusion

This give and take ensures that every change’s trade-offs are adequately reviewed before the change is implemented. A failure to do so could cause a failure in the overall project objectives.

References

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