Overview of the Sweet Spot ™ Project Management Flexibility Model

Sweet Spot ™ Project Management Flexibility Model © 2013-2017 H.G. Weissenberger, Jr The traditional *Iron Triangle* model (a.k.a., *Steel Triangle, Constraint Triangle*) that illustrates the relationship between project time, cost, and quality is an ineffectual way to look at the flexibility needs of project management; primarily because it is a "negative impact" model. The *Sweet Spot* ™ *Project Management Flexibility Model* (hereinafter: *Sweet Spot Model*) re-defines the use of a project management flexibility model to *maximize project results* rather than simply knowing where the give-and-takes occur. The *Sweet Spot Model* begins by identifying proper prioritization for the four key project management factors ("resources") that are used in decision making.

Resource Priority

The first thing to determine is the Resource Priority. That is, the importance of each resource and the priority each has, weighted against the others, in decision making. This is a 0 to 10 scale of priority and flexibility with 10 being the highest priority; and therefore, the least flexible.

0	1	2	3	4	5	6	7	8	9	10	
τιΜ	E										
COST (Budget less required costs)											
sco	PE										
QUALITY											

Business Priority

The next determination is the Business Priority; the priority of Customer's interests and philosophies versus those of the project Deliverer, whose priorities prevail in decision making, and to what degree. The priority section may also address other weighting factors such as legislation or code.

CUSTOMER (1-10)	(Priority Weighting <u>10</u>):	Time <u>10</u>	Cost <u>10</u>	Scope <u>3</u>	Quality <u>3</u>
DELIVERER (1-10)	(Priority Weighting <u>8</u>):	Time <u>9</u>	Cost <u>8</u>	Scope <u>10</u>	Quality <u>9</u>

In this example, the Customer's priorities are "Just get it done, fast and cheap" but your company's (division's, etc.) reputation is built on the priorities. You, as Deliverer (the company or division executing the project), want the project to be "Done and done right, a good value, and timely." Because Customer's Priority Weighting is higher than Deliverer's (as it usually would be), the priority is given to "fast and cheap" when necessary resource adjustments are made.

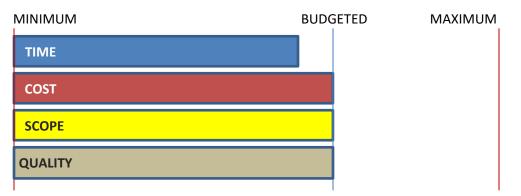
However, the Deliverer, despite having a lower Priority Weighting than the Customer's, has validity in their prioritization and may have a driving force behind it. Therefore, their priorities are weighted in the adjustment algorithm against how close the business priority rankings are between the Customer and Deliverer. The closer Deliverer's priority rakings are to the Customer's, the more say Deliverer will have in establishing the determining factors in decision making. The further apart they are, the more consulting may be required of Deliverer's program manager.

Once the priorities are set (though subject to change) the current picture of the project is introduced in terms of the key project management factors ("resources").

Current Limits

At the beginning of a project, each Current Limit is set to "BUDGETED", indicating that the project is on budget. A maximum overrun cushion (beyond the budget) is determined. This is the maximum amount the budget can be exceeded before the project will be cancelled. This could be a dollar amount, a percentage of the budget, or some other measure.

In the example below, the project has been running for a while and now it has been decided that the project has to be completed sooner than originally budgeted)



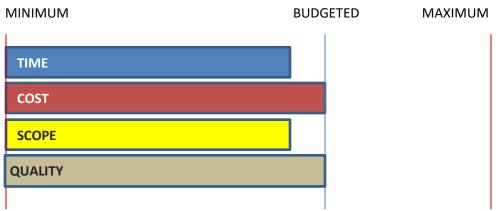
Minimum is the least amount of each resource needed to expect an acceptable measure of success. *Budgeted* is the project budget for each resource and should result in complete success. *Maximum* is the total amount of budget plus overrun that is tolerable before the project is abandoned.

When the priorities and current resources have been determined, the impact of changing any of the elements (time, cost, scope or any priority) can be calculated to illustrate "Reality" based on the current information.

From our example, the reduced time allotment is reflected in the following "Reality" graphic but since Cost was prioritized a 10 (highest, least flexible priority), it will not adjust from its current limit. Similarly, we are not yet prepared to reduce quality. Therefore, the **reality**, based

on the current information, is that a scope reduction is indicated to complete the project on time.

Reality

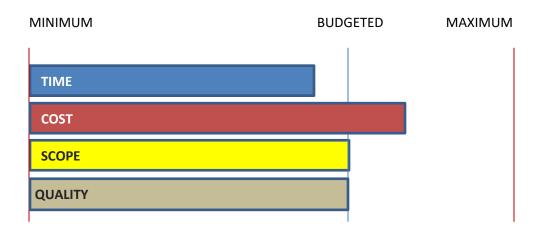


Finding a Project's Sweet Spot

Although the calculated reality is a good indicator of immediate action necessary to stay the course, it is not always an indicator of good business. That is why the *Sweet Spot Model* goes one step further... to find a project's Sweet Spot.

Sweet Spot refers to the best possible "what if" scenario allowed under the information available for our established task resources and priorities. This is what the Project Manager should be striving for; and certainly, should drive the Project Manager's communications and negotiations.

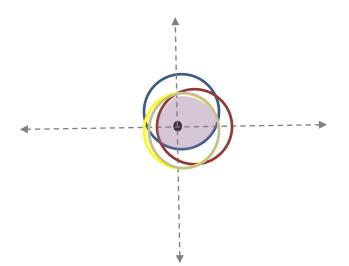
In our example, we know that there is a maximum overrun amount acceptable beyond which the project will grind to a halt. The time limit has been fixed but there may be some latitude to extend the cost of the project in order to achieve the full scope within this new timeframe, barring any constraints. Identifying the minimum cost adjustment necessary that allows fully meeting the scope within the prescribed time limit could be defined as "finding **the Sweet Spot**."



For a moment, think of our factors as interlocking rings. When a project starts, all four rings overlap with the sweet spot, the set of resource values that provides the greatest chance of completing the project without having to stretch resources (which should be the starting budgets), is represented by the dot at the center

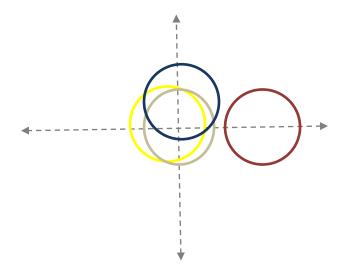


The shaded area in the middle represents the project's flexibility; the ability for each ring (resource) to vary from the budget and still be within project maximum tolerances. Using this type of visualization, it is easy to see, that while the flexibility of the resources may be affected, change does not have to derail a project or even impact the schedule.



In the example shown above, some time has been taken away from the project. The potential impact to the project is represented by the blue ring moving out along its axis. To avoid compromising scope or quality, more funding has been added to the project from the reserves. The impact of tapping the reserves is indicated by the red ring moving out along its axis. Since there is still a common area within the rings, the changes were within tolerances. However, new sweet spot values will have to be calculated because there is now less cost reserve available (the resource is headed toward its maximum) and we are already over-budget. Also, because our timeline is moving toward its minimum. The blue ring still moves outward because

it indicates the impact, regardless of whether the deviation from the budget is toward the minimum or the maximum.



Should there ever reach a point that adjusting the impact values creates a situation where there would be no four-ring overlap, then we know the project has reached a point of impending failure. At this point (and it should have been forecasted, not reached), the parameters of the project must be reevaluated and executive decisions made about the future of the project.

In the image above, we see that all of the money available has been put into the project to meet an impossibly short deadline and a minor scope change. The quality requirement has not changed from the original budget. The project is no longer viable as there is no flexibility and no sweet spot set.

This type of flexibility visualization tool can make it easier to predict and mitigate project failure before it can occur.

However, let's not stop there...

One of the most impactful and most common mistakes made in Project Management is to forget what the words Time, Cost, Scope and Quality really mean... and thus what these four key resources mean to a project. The *Sweet Spot Model* requires that we examine the values and priorities found within each of the key resources. The proper management of the key resources is how we can ensure that we can meet, and are meeting, our delivery requirements.

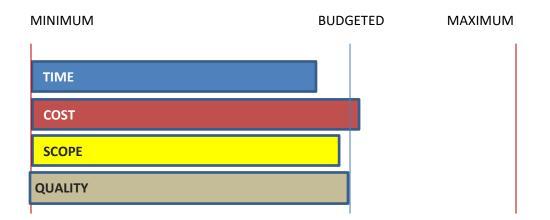
TIME – There is usually a deadline and a starting date defining time. But keep in mind that time is affected by such factors as holidays, vacation days, dependencies, constraints, weather, resource changes, and regulation.

COST – We tend to measure cost as dollars but it helps to understand what those dollars are paying for. Cost includes such things as FTEs and surge help, research, licenses, equipment wear/depreciation, and yes, dollars to achieve the needed level of success. Cost is often more flexible than you think as there may be multiple sources/entities/stakeholders that can contribute to the pot.

SCOPE – Scope defines both the work that is to be done as part of the project and what work is *not* part of the project. Scope does not define what should be done and it is not very flexible. Additional work can be accommodated if it is in scope but should not be added, even if the resources exist, if it is out of scope. So-called "scope creep" can easily sidetrack the expected results of a project and strain other resources.

QUALITY – Quality has various connotations. It refers to standards, regulations, and compliance. It refers to customer expectations for usability. It refers to maintaining trust that a project manager can deliver *consistently* and within assigned project parameters. Quality measures need to be established at the beginning of a project so that all parties are on the same page and so a "quality budget" resource can be established for sweet spot calculations.

Keeping this in mind, we may further define the **Sweet Spot** as the correct **balance** of our resources. In our example, once you weigh the *value* of all of the factors, you may find that you are willing to let go of a little scope to keep cost overrun to a minimum. Perhaps you can redefine some scope into a separate phased project; for example, training. You may even find you can pass some of that scope to another group (like a training group).



When you have done all of these things and can find the best balance for your resources, you have <u>truly</u> found the management SWEET SPOT.

A final word of project management caution:

- Be sure you <u>communicate</u> the Sweet Spot information to all stakeholders and get their buy-in (and any approval signatures you may need); especially if change is required.
- Be sure to re-baseline your project when changes to the Sweet Spot parameters dictate a change in schedule.