PROJECT POC – HOW TO CALCULATE IT?

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MOTIVATION

In project management practice, the „PoC" term is and concept is frequently used in different calculation but it not explained enough. And I'm meaning to the fact that is not explained how to determine / calculate it.

The "PoC" is so important in almost all project evaluations that I considered that must be explained to every Project Manager and this is the reason I wrote this assertion about it.

ROLE OF "POC"

The term "PoC" stands for "percent of completion" and it is used to offer a "first sight" about project:

- Where the project is as realization
- How long it will take to finish
- If available / unused budget will be enough for right finishing
- If something seems to be wrong, we can identify a smaller subset of causes
- If we can respect the deadlines and contractual terms

These are the most important usages of "PoC", but there are multiple other usages, for example to construct and evaluate some kind of "what-if" scenarios when a change request must be approved or rejected, and many others. But about these is subject of another article: "How can help you the PoC?".

SO, HOW TO CALCULATE POC?

FEW WORDS ABOUT "PRECISION"

From the beginning it must be said that no matter how hard you'll try, you'll not obtain an accuracy of 100% in PoC calculation…But, maybe, is not even needed this accuracy; PoC is an estimation that is used in estimations! For example, how important could be to know the estimated costs up to completion at level of cents?

Of course, the accuracy it is very important but RELEVANCE is THE MOST IMPORTANT thing. A PoC is relevant when it is really ASSUMED, TAKEN AND TREATED SERIOUSLY by every person that contribute to its calculation. What it means that? An example ca be more relevant than one thousand of words… Let's say that a person makes an estimation of 24% today and after 2 weeks make another estimation of 23%… How is possible? There are changes that you're not aware? I think you understood what means "treated seriously" …

If any person makes and estimation, how long can lie? Maximum percent is 100% and means that finalized, so has no reason to work / to be paid in the future. If percent growths too slowly denote another lie or a wrong approach. If percent decrease there is a change you're not aware about or another lie…

THE KEY RESIDES IN DELIVERABLES

Every activity done in a project HAVE a deliverable; visible or not, tangible or not, it EXISTS. Why? Because an activity without a deliverable ir is really something "that will be done for NOTHING", the 'nothing' being deliverable (just joking but is so real…). You AS Project Manager, MUST BE AWARE of ALL deliverables, even if you do not understand the content, you should now the structure of it, let's say the table of contents.

Every deliverable must be decomposed in smaller parts (not necessarily physical but logical following the table of contents in case of a document for example). Deliverable must be not only documents, but systems, products, a registration number, and so on. It's up to you how much you'll go in details and probably you'll keep a reasonable balance between accuracy and the effort needed to obtain it. Remember that an accuracy of 100% is not more useful that a 95% one – most important is to produce relevant and useful estimations.

WEIGHTING A DELIVERABLE

Let's take a deliverable (name it 'dlv-a') and make a weighting schema for it:

Deliverable / Responsible	dlv-a / Person X
Sub-component	Weight
Sc-1	10%
Sc-2	20%
Sc-3	50%
Sc-4	20%
TOTAL	100%

So, let's explain it even it seems obviously:

- Deliverable 'dlv-a' was *decomposed* (of course by a technical people / team!) into 4 components: Sc-1, Sc-2, Sc-3 and Sc-4;
- For each component was established (estimated by a technical team) a weight – this probably was done considering component importance, complexity, experience needed to realize it, and so on;
- Sum of all sub-components give 100% (this is a checking fact);
- Deliverable has a *RESPONSIBLE* person established (is not a person that necessarily work actively on deliverable realization, but RESPONDS & ASSUME the realization).

So, how to use it? Let's say that at a reporting milestone, the responsible says the following about realization status of each sub-component:

Sub-component	Current state
Sc-1	100%
Sc-2	50%
Sc-3	0%
Sc-4	0%

Now let's calculate the deliverable state based on that reporting:

Sub-component	Reported state	Weight	Contribution
Sc-1	100%	10%	10%
Sc-2	50%	20%	10%
Sc-3	0%	50%	0%
Sc-4	0%	20%	0%
Deliverable 'dlv-a' current state			20%

I just used a 'weight of weight' schema (for example 'Sc-2' is in 50% now which means a contribution on 50% from 20%, so 10%). Summing all contributions results in a 20% current state of deliverable.

Hard? No. Difficult? No. Needs more attention? Yes, because my estimation is there are some deliverables (more than 1!). Need for an automated tool? In most cases Yes; for a reasonable number of deliverables you can use spread-sheets tools; for a bigger number of deliverables we recommend a specialized project management tool[1].

GENERALIZING

For the whole project must be constructed a *hierarchy* (tree) of deliverables and weightings, from down to top (from leaves to root, the project being root). You must take care that every non-leaf node to cumulate a weight of 100% from all its subtrees. There will be some work and concentration but for sure the benefit of having a more usable (and why not, realistic?) estimation of "PoC" will be invaluable for project and all stakeholders including you. *For sure that you'll be prouder after first well documented, sustainable and justifiable status report!*

SOME RECOMMENDATIONS IN CONCLUSION

- Always preserve a 3% weight for your review and approval of each deliverable;
- Always preserve a 7% weight for customer review and approval of each deliverable (if is the case);

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[1] You can find different independent tools, but is hard to find a 'easy-to-use and simple' one that covers ALL project management issues. For this purpose you can try our solutions available at: http://products.ren-pmo.renware.eu/.