[Using the PSIP Toolkit to Achieve your Goals – A Case study at The HDF Group](#)

(the slides are available under "Presentation Materials" in the above URL)
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Q. How small or big a chunk of work can go on one tracking card? I guess what I'm asking is how small do you have to chunk up the work for the PTC to be effective?

   A. It can be hard to find the sweet spot between too large and too fine grained steps. It's important that each step is team oriented and hopefully involves multiple team members. My rule of thumb is that each step should take the full team working full time about a week (or less). Of course, no one will be working on this full time, so in the end it will take longer.

Q. Full buy-in from the team seems to be required for this to be effective. How can one convince their team to get on board? Can one or two people get it started before engaging the entire team? Do you have any anecdotes that you can share on getting folks to buy in?

   A. Rather than starting with a few team members, it may be better to have everyone on the team take the self-assessment survey at RateYourProject.org. This is to make sure that most people agree on what is a priority to change. This self-assessment often leads to some really enlightening discussions, things you may think are a problem may not be a priority to your fellow team members!
   B. Of course, you don't really need to convince everyone to get on board… but you do need to convince management. It is important that management gives time and space for this work to be accomplished. In addition, management should be monitoring progress towards completing the card.
   C. See the THG section of this webinar for a great anecdote!

Q. What was the main indicator that your project needed process improvements, that motivated you to put in the time and effort to adopt the PSIP toolkit?

   A. There is always room for improvement. It may be worth the effort to adopt the PSIP toolkit if you are finding it difficult to get all team members involved and committed to making a change. The lightweight, yet formal PSIP method can be useful for teams that are struggling to make changes through grassroots or individual efforts. As previously mentioned, adopting this formal method requires management buy in, which will hopefully set everyone up for success.

Q. What are some of the ways working on PTCs can help teams to agree on what improvement to make first?

    A. Constructing a concise card requires team agreement. Creating user stories (you may decide that multiple stories are required) will create a common vocabulary around *why* everyone is working on this. It's important that everyone agrees on the steps, both to make sure that everyone's concerns are addressed and to ensure everyone is involved in the work.

Q. Are there existing tools that can easily integrate PTCs? We currently use a combination of Github projects and Kanban boards for tracking which Github issues are needed/completed for a large task. We could simulate PTCs with this, but it would be nice to have a PTC be more like a Github issue, itself.

    A. PTCs as a github issue is totally possible. The [PTC Catalog](#) has several cards in Markdown that you can copy. You may want to reformat the card slightly to make it work with your issues, either using a table for the card or maybe a checklist. Or multiple issues. Whatever works best for you.

Q. If using something like git would you suggest the PTC be one issue and other issues be used for tasks for each step?

    A. It really depends on how your team is using issues. Is there a lot of discussion that is taking place in the issue? Or are the issues just review during team meetings? It may be helpful to have the PTC be a single issue with a checkbox for each step. If each step requires enough discussion, it may be more useful to have them each as their own issue.

Q. Reed M. mentioned that PSIP can be used with processes like agile, kanban, etc. What software improvement method is PSIP most like, and what makes it lightweight?

    A. Elena: Based on THG experience PSIP reminds Kanban: we visualized our work on the Confluence page (we could use JIRA), we knew when we would be done, and we could easily see the workflow. If a project involves customer's feedback and future improvements depend on the feedback, then an agile approach also makes sense. PSIP is lightweight because it tackles one improvement area at a time and focuses on tracking the progress toward the goal; it also has much lighter requirements on artifacts (cmp. With CMMI).

Q. Elena, how many times did your PTCs change? What did you do with previous versions of your PTCs?

    A. After we created PTC we didn't change it. We did change the steps when going between scores 0 and 1. Looking back now, the card would be different because of the things we

learned. For example, as I explained during the talk, scores 2 and 3 were achieved when we finished score 1. It would be reasonable to reflect this in the card itself.

Q. What is your favorite part of working with teams to implement PSIP?

A. Elsa- It's great to see teams take the PTC and run with it. It can be hard for software engineers to take the time to step back and create a larger plan. Many people want to jump into the nitty gritty details right away and start picking tools or discussing line length (as in THG's Coding standard example). Taking the time to construct a PTC and a higher level plan is a really important step, before everyone goes off to work on the part they are most passionate about.

Q. Do you think that part of what helped get the coding standards pinned down after not doing so for 20+ years was the dedicated funding, whereas previously the activity was not directly funded and not seen as urgent?

A. Elena (THG) - Going through the PSIP process of defining and agreeing on the current state and our goal along with agreeing on why we needed coding standards (users' stories), was critical. If we just had funding but didn't have a process we would not achieve our goal in 3.5 months. Having a sponsor who was interested in this work helped a lot. Also, the group felt a lot of pressure from the community after we switched to GitHub.

B. Elsa- We (the LLNL sponsors) had a very similar question. The response was, while dedicated funding is helpful, it wasn't the tipping point for getting this work done. Instead, it was the contractual obligation to get the work done. Having a 3rd party and a deadline for delivering results was more important to the THG developers than just having money to work on the issues. The work was previously seen as important, but without a deadline, that never crossed into "urgent."