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# What If You Held A Best Practices Meeting— And Nobody Came?

by William R. Flury

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“Hey! I’ve got a great idea! The Quality folks are always telling us that we should be on the lookout for better ways to do things. Let’s hold a series of Best Practices workshops and see what ideas people bring us. We can email everyone to invite them and ask them to come prepared to talk about the Best Practices in their shops.”

That’s how it all began. We were discussing how we could get started with the business of process improvement and Mickey came up with the idea of holding a series of workshops where people could come together and discuss their Best Practices. We all thought it was a great idea. After we talked about it some more, we tried to figure out how many people might come and what we might have to do to prepare for the workshops. We agreed that we should test the idea by each of us calling some key people in our respective Centers and getting their reactions. Before we split we all agreed to make the calls and report back at our next meeting.

In order to keep the phone calls closely related to our topics of interest, we decided to focus them on the Key Process Areas (KPAs) of the Software Engineering Institute (SEI) Capability Maturity Model (CMM). We thought that we should limit the discussion to the Level 2 KPAs: Requirements Management, Planning, Project Tracking and Oversight, Subcontractor Management, Configuration Management, and Quality Assurance. Focusing on just a few practice areas should give us the biggest payoff. If we could identify the best practices in these areas we could endorse them as standards and start to spread them around.

What a surprise we got. The reaction to our calls was nothing like what we expected—but it did reveal a lot about our practices.

## Reaction #1

“Gee, that sounds like a really great idea . . . but we don’t have any Best Practices.” These respondents said that they *do* all of the things that we talked about (i.e., the KPA items) but they always do them differently. They said that:

- Every job is different.
- Every customer is different.
- The staff comes from widely varied backgrounds and they learned different techniques in school, in other Centers, or that worked well on other projects.
- We just use what we think is best for each case.
- All of these get the work done, so it would be hard to choose which is best.

## Reaction #2

“How would you ever decide which practices are *best*?” With all of the different types of tasks and all of the different procedures, methods, techniques, and tools in use, how would you ever begin to make some comparisons and evaluate differences?

What kinds of stories did we hear?

- Some things we do are in the textbooks . . . but we’re not doing it exactly that way.
- If you asked five people how we do it, you’d get at least six answers.

- The methods keep changing.
- The staff keeps changing and the team does things the way they think will be best for the circumstances—and that varies by team experience.
- We don't really keep track from one project to the next on what we do differently.
- There might be some commonality among projects, but we don't keep any record of the techniques we use for any tasks. We rely on the memory of our key people.

We concluded that the most significant problem here was the fact that none of the practices was written down. There was no record of what practices were being applied to the different tasks and, as a result, it would not be possible to compare results of the use of different practices on similar tasks.

### Reaction #3

“When you say Best Practices, who are they supposed to be *best* for?” Every set of practices requires a mix of resource inputs and provides a set of outputs. Everyone involved with those practices is affected in a certain way. Each person can determine a cost/benefit ratio associated with each practice. “So, who do we want to please with our Best Practices: (1) the customer; (2) our staff; (3) the supported and supporting systems with which our practices interface? For whom must we be best? That’s a tough question.”

“Looking at it another way, it’s hard to figure at what we must be *best*.” Is the key (1) cost, (2) schedule, or (3) technical performance, or (4) some combination of the above? If it is to be a combination, what are the relative weights? Some people contend that it can all be reduced to a question of cost. Slipped schedules have an operational delay cost. Poor performance has a cost in rework—and, of course, cost overruns have a cost—but we don’t have any good way to tally these.

We concluded from this that we would have to define our objectives better so that we could begin to do a better job of evaluation.

### Reaction #4

“If we were to come to your meeting and describe how we do things—and others described how they do things, wouldn’t a *Not Invented Here* (NIH) attitude prevail? How would we ever be able to convince others that our way is better than their way?” That’s the reaction we’re used to seeing. People come to meetings and talk about great ways to do various jobs and then they go back and continue doing exactly what they had been doing all along. Nobody ever comes forward with any convincing data—just opinions—and they don’t sell.

Here’s a summary of the situation.

- There are no standard practices—in fact there are not even any routine practices identified.
- There does not seem to be any basis for comparison among practices since we don’t record which practices are used for various types of tasks and we don’t record the outcomes.
- We don’t seem to know how to determine *best*. We haven’t decided what needs to be best and for whom.
- And, finally, we live in an engineering environment where we rely on facts to make our engineering judgments but, on the question of engineering practices, we have no facts, just opinions.

### At the Next Meeting . . .

So, at the next meeting we decided it would be premature to try to hold the proposed workshops. We had to devise some way to start attacking the problems that had been raised.

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We concluded that we should first focus on just one or two of the Key Process Areas and try to figure out how we should start to find our *Best Practices*. One thing was very clear: we had to get people to document their practices. We couldn't even begin to evaluate the practices until we could see them. So Step #1 "Get the practices documented."

Next, we addressed the question of what you would compare. In looking at Requirements Management practices, for example, we could look at:

- How many requirements were being handled,
- How clearly each was defined,
- How many TBDs were in the list,
- The stability of the list over time (amount of change),
- The verifiability of the requirements, and ultimately,
- The validity of the requirements.

We pondered how much recordkeeping might be required and concluded that it would not take much. We would need to record:

- The count of requirements;
- The number of changes per week or month . . . and the reason:
  - Lack of clarity,
  - Misunderstood customer,
  - Customer changed mind,
  - Tests could not verify meeting of requirement, and
  - Other; and
- The number of perceived shortcomings in the products after delivery (validity).

With those figures for any set of practices, we could begin to compare their relative performance with other sets of practices.

We looked also at planning. Maybe that would be even easier. For planning, we would just have to have good data on the planning estimates and the actual results. However, when we looked at this, it was just a bit more complicated. For one thing, we figured that we would need to know the basis of the planning estimates—how did we figure what effort each of the tasks would require? We would have to document that as a key element of the planning practice description. If "expert opinion" were being used, we would need to document the expertise. If an engineering roll-up were being used, we would need to document the work breakdown procedures that supported it. If a model were being used, we would have to know what model and the expertise of the operator using it. If standard rates were being used, we would need to know the source of the rates.

### **Our Action Plan Emerges**

After hearing all the reactions and thinking them over, we decided to take some steps to start laying the foundation for identifying and evaluating the practices of our respective Centers. Here's what we decided:

1. We should encourage everyone to start writing down or drawing a picture of the steps in the current practices. This would be a necessary first step that would provide the foundation for all measurements and comparisons.
2. We should ask people to line up all the variations of each practice and see how they are the same or different. (We think that they will find much more commonality than they expect.) We will encourage the staff to agree on the common items and start to use them in the same way on all projects. We will also start to work with them to see how they can begin to evaluate the relative value of the variations so that they can decide which is best for their situation.
3. We will start people thinking about the concept of *Best Practices* supported by real data to prove their worth in various circumstances.

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4. We will start publicizing the idea that everyone should adopt this approach as their first “best practice.” We will begin by doing a newsletter article on the subject.

*The above is a fictional account based on staff responses to mention of the possibility of holding some Best Practices workshops. The problems and the suggested solutions are real, the “meetings” are a literary device to keep the reader involved.*