Getting the Numbers Out in the Open

When I was the lead of the Software Technology Support Center's measurement domain, numbers were always in high demand. I received numerous requests for examples of real numbers that other projects were collecting on their processes, quality, and return on investment. Unfortunately, most organizations consider these numbers to be extremely sensitive and are not willing to share them.

So, where do you look if you want to know how your organization is doing? First, you need to know just what it is you are trying to do; establish your organizational goals. Then ask the questions that will let you know whether or not you are meeting these goals. Finally, decide what information you need to answer these questions. One of the most important things with this approach is to start simple; five to 10 attributes (such as size, effort, schedule, cost, and quality) are a reasonable start. After you begin collecting this information, you can simply look to yourself to know how you are doing. Once you have some preliminary information, you can start to see how you are doing by comparing departments within the organization, by comparing the organization to itself via historical data, or by comparing your organization to the rest of industry. All of which brings us back to the coveted industry data.

The current lack of data is precisely why I am so excited about the articles featured in this month's theme section. Seldom does CROSSTALK receive articles that openly share such information. Donald J. Reifer's article, *Let the Numbers Do the Talking*, shares historical information from his collection of numerous projects. Reifer also includes some very good advice on how not to abuse the information.

In *How CMM Impacts Quality, Productivity, Rework, and the Bottom Line*, Michael Diaz and Jeff King share information that should prove useful for organizations trying to justify the cost of implementing a process improvement initiative. While actual numbers such as productivity were again considered sensitive, the actual process improvement numbers are very useful for providing justification for process improvement and potential return on investment. I am confident many organizations will benefit from this article.

Walt Lipke shares one way his organization uses and benefits from their numbers and passes this tip to CROSSTALK readers in *Statistical Process Control of Project Performance*.

As Bruce Allgood promised in February's "From the Publisher," our supporting articles begin with Suzanne Garcia's article, *Are You Prepared for CMMI?* This is an excellent article discussing information needed for successful technology transition. Next, Peter Amey shares information on an annotated subset of the Ada language developed in the United Kingdom that is showing success in his article *Correctness by Construction: Better Can also Be Cheaper*. Finally, Frank Richey shares ideas for helping the modeling and simulation community in *Modeling and Simulation CMMI: A Conceptual View.*

This month's articles show that measurements collected during software development can be a big help in predicting software development time, cost, and quality; can help justify funding for a new project; and can be used to monitor existing projects. Numbers are necessary for developing software.

When I received this month's theme articles, I was so excited to share their information that instead of trying to squeeze them into a planned issue as supporting articles, we created a new issue with this theme to highlight this information that was so often requested. I hope you find them useful for your planning and current practice comparisons.

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