



Really Bad Metrics Advice

Sponsor Lt. Col. Joe Jarzombek
801-777-2435 DSN 777-2435
jarzombj@software.hill.af.mil

Publisher Reuel S. Alder
801-777-2550 DSN 777-2550
publisher@stsc1.hill.af.mil

Managing Editor Forrest Brown
801-777-9239 DSN 777-9239
managing_editor@stsc1.hill.af.mil

Senior Editor Sandi Gaskin
801-777-9722 DSN 777-9722
senior_editor@stsc1.hill.af.mil

Graphics and Design Kent Hepworth
801-775-5555 ext. 3027
graphics@stsc1.hill.af.mil

Associate Editor Lorin J. May
801-775-5555 ext. 3026
backtalk@stsc1.hill.af.mil

Editorial Assistant Bonnie May
801-775-5555 ext. 3022
customer_service@stsc1.hill.af.mil

Features Coordinator features@stsc1.hill.af.mil

Customer Service 801-777-8045
custserv@software.hill.af.mil

Fax 801-777-8069 DSN 777-8069

STSC On-Line <http://www.stsc.hill.af.mil>

CROSSTALK On-Line <http://www.stsc.hill.af.mil/Crosstalk/crosstalk.html>

ESIP On-Line <http://www.esip.hill.af.mil>

Subscriptions: Send correspondence concerning subscriptions and changes of address to the following address:

Ogden ALC/TISE
7278 Fourth Street
Hill AFB, UT 84056-5205

E-mail: custserv@software.hill.af.mil
Voice: 801-777-8045 DSN 777-8045
Fax: 801-777-8069 DSN 777-8069

Editorial Matters: Correspondence concerning *Letters to the Editor* or other editorial matters should be sent to the same address listed above to the attention of *CROSSTALK* Editor or send directly to the senior editor via the E-mail address also listed above.

Article Submissions: We welcome articles of interest to the defense software community. Articles must be approved by the *CROSSTALK* editorial board prior to publication. Please follow the *Guidelines for CROSSTALK Authors*, available upon request. We do not pay for submissions. Articles published in *CROSSTALK* remain the property of the authors and may be submitted to other publications.

Reprints and Permissions: Requests for reprints must be requested from the author or the copyright holder. Please coordinate your request with *CROSSTALK*.

Trademarks and Endorsements: All product names referenced in this issue are trademarks of their companies. The mention of a product or business in *CROSSTALK* does not constitute an endorsement by the Software Technology Support Center (STSC), the Department of Defense, or any other government agency. The opinions expressed represent the viewpoints of the authors and are not necessarily those of the Department of Defense.

Coming Events: We often list conferences, seminars, symposiums, etc., that are of interest to our readers. There is no fee for this service, but we must receive the information at least 90 days before registration. Send an announcement to the *CROSSTALK* Editorial Department.

STSC On-Line Services: STSC On-Line Services can be reached on the Internet. World Wide Web access is at <http://www.stsc.hill.af.mil>. The STSC maintains a Gopher server at [gopher://gopher.stsc.hill.af.mil](http://gopher.stsc.hill.af.mil). Its ftp site may be reached at <ftp://ftp.stsc.hill.af.mil>. The Lynx browser or gopher server can also be reached using telnet at [bbs.stsc.hill.af.mil](telnet://bbs.stsc.hill.af.mil) or by modem at 801-774-6509 or DSN 775-3602. Call 801-777-7989 or DSN 777-7989 for assistance, or E-mail to portr@software.hill.af.mil.

Publications Available: The STSC provides various publications at no charge to the defense software community. Fill out the Request for STSC Services card in the center of this issue and mail or fax it to us. If the card is missing, call Customer Service at the numbers shown above, and we will send you a form or take your request by phone. The STSC sometimes has extra paper copies of back issues of *CROSSTALK* free of charge. If you would like a copy of the printed edition of this or another issue of *CROSSTALK*, or would like to subscribe, please contact the customer service address listed above.

The **Software Technology Support Center** was established at Ogden Air Logistics Center (AFMC) by Headquarters U.S. Air Force to help Air Force software organizations identify, evaluate, and adopt technologies that will improve the quality of their software products, their efficiency in producing them, and their ability to accurately predict the cost and schedule of their delivery. *CROSSTALK* is assembled, printed, and distributed by the Defense Automated Printing Service, Hill AFB, UT 84056. *CROSSTALK* is distributed without charge to individuals actively involved in the defense software development process.

According to my data, roughly 122.45 percent of this journal's 347,583,712 readers need some sharpening up on how to effectively collect and use metrics. There is less than a 0.0345 percent chance that this column will help.

Q: I'm a manager who believes in keeping metrics simple, which is why I've limited the number we collect to 62. But I also want to simplify their collection—do you know where I can find timecard readers designed for bathroom stalls?

A: Try voice print-activated stalls with timed door locks. But first, are you really trying to collect 62 metrics? 62? [snicker snort chortle] You're obviously clueless about the "KISS" principle: *Keep It Stupefyingly Strenuous*. You can collect a lot more than 62 different metrics. The accepted rule of thumb for the number of metrics you can reasonably work with is this: "Seven, plus or minus the square of the number of door knobs in your home." Remember, if something can be measured, it *must* be measured, and all metrics are equally critical.

Q: I feel vindicated. Now I can introduce additional metrics for every obscure area of our process improvement model. Naturally, I plan to drop the whole wad as an enforced edict and then make myself unavailable for a few weeks.

A: Bravo! But be sure you don't overcomplicate things by defining every minute detail, such as data integrity standards or what you plan to do with the data. People learn nothing from constant handholding. Your job is to sit back and wait for those reliable numbers to start pouring in.

Q: Great! What do you suggest I do with all that data?

A: What should you do with the data? Do? That question implies that metrics are a means to some end. Don't waste resources—time spent analyzing metrics is time that could have been spent collecting even more metrics.

Q: My boss keeps asking for data on stuff I don't think can be quantified—and it's often common sense stuff he could just ask us! Aren't metrics just a big sham?

A: Shhhh! You're right, metrics are actually an extensive conspiracy—but an extremely helpful one. When people want to make decisions based on "facts" rather than "opinions," you need metrics to push your personal agenda under the guise of unassailable objectivity. Perception is everything:

Politicized emotional drivel: "Let's try my approach. Her plan isn't working."

Objective insight: "A consumptive analysis of my plan projects a 84.67 percent increased density of pro-active rationals within six months. However, her key preambulatory vindicators are creating a 24.38 percent downward sloping polymorphic trend. Plus, she wears really cheesy business suits."

Q: But what if I don't know how to collect and project those kind of numbers?

A: Then you're in the same boat as the people who want to see your metrics. This is the whole key to effectively utilizing metrics: They don't exist to *uncover* reality—they're for *creating* whatever reality suits you.

Q: I lead a project with a beautifully simple metrics program that consists of two critical measurements: How many days past the deadline we are, and how many dollars over budget. But lately I've had the nagging feeling that I'm not getting enough mileage from these metrics. Is there any way I can use metrics to promote dishonesty, infighting, and poor work habits?

A: Certainly. Once you've worn down employees with coma-inducing quantities of metrics that have no perceivable link to any business objectives, pick one favorite, such as lines of code, then base penalties and rewards on it. Resulting competition will discourage teamwork and will lead to ineffective work and "creative" reporting practices among some employees. Their skewed metrics will give you great overall numbers, which you can then use to dazzle your superiors.

Q: "Great" numbers draw scrutiny. How about "barely exceeding expectations"?

A: Fortunately, herpetological analysis indicates a 98.65 percent propensity toward established parameters, regardless of iambic deviance from ergonomics.

Q: Huh?

A: If you tell your employees what final numbers you want to see, no matter how absurd, they'll manage to deliver them without even breaking a sweat.

Q: And you don't think anyone will audit my metrics for accuracy?

A: You can bet 97.387 percent of the farm on it.

— Lorin May

Got an idea for BACKTALK? Send an E-mail to backtalk@stsc1.hill.af.mil