

IT Needs Good Writers

Author: Anthony R. Reed, CPA, PMP

Originally published in *ComputerWorld*

As complaints about high priced, low-quality systems increase, IT departments are seeking the wisdom of system design gurus, vendors, and consultants. But they're getting the right answers for the wrong questions and continually making the same mistakes.

The IT managers want to know what products or services will help build better systems in less time. They should ask what really caused their old problems and how can they be solved.

The vendors and consultants are solving the short term problems, but one of the main ones remains: Developers and analysts have developed very bad writing skills. They write documents to get them out of the way rather than to convey messages. This contributes to the downfall of many IT projects, system life cycles, and careers.

Bad prose is very expensive. The user requirements documentation is the foundation of a project. A poorly written, 1-inch thick document will usually result in production cost overruns and high maintenance expenses.

After making several attempts to understand the first few pages of a document, users get frustrated. If their high enough up the corporate ladder, they'll tell a subordinate to summarize the document for them; or they'll ask him to explain it, page by page, during a marathon walk through.

Frequently, users find themselves between the proverbial rock and a hard place. They need the system by a certain date; the requirements document is incomprehensible; there isn't enough time for a complete English translation; and if they don't sign off, the project will be late and more expensive. Several months later, a costly system, that fails to meet their expectations, is delivered.

The developers also get frustrated. They receive verbal program specifications, rather than written ones, because the analyst doesn't want to write. Despite inadequate specifications, the developers must provide a completion date.

After additional discussions with the analyst, the developers discover that the program is far more complex and time-consuming than expected. However, the deadline remains unchanged, and they're pressured to complete the undocumented program. Inevitably, the developers spend more time getting verbal instructions than it would have taken to write the specifications.

When this undocumented program goes into production, it becomes another nightmare for the maintenance developer. The cost of poor specifications is a low quality product, decreased productivity, poor time management, and increased development and maintenance expenses. These scenarios are played over and over for the detailed design, user guide, operations manual, and test plans. Developers want to bypass prose and go straight to programming.

Unfortunately, IT managers tend to support this methodology. They feel that a project isn't making progress until they can count lines of code. People expect to develop high quality systems without well-written documentation. This is like writing a movie without a script – very risky.

Reverting to Prehistoric Practices

This fear of writing has led to pictorial user requirements and specifications. We've progressed from green templates and special forms to PC-based drawing and diagramming tools. We still use functional decomposition design methods, but instead of writing prose, we use boxes, bubbles, braces, brackets, and other diagrams to communicate. It's as though we've gone back to prehistoric times, when humans drew pictures on the cave walls.

IT Needs Good Writers

Some consulting firms will use joint application design teams to develop requirements. The team consists of a gatekeeper, an interrogator, and a scribe. The gatekeeper locks the users and IT staff in an offsite dungeon. The interrogator hammers the requirements and specifications out of the users and IT staff, while the scribe records the confessions.

The cost of poor writing skills is the cost of CASE products and consulting services. Furthermore, these solutions may help satisfy the short term problems but the fundamental problem remains: Most of the IT staff is professionally illiterate.

Companies should invest in writing courses. These courses should encourage the staff members to accept criticism about their writing and accept the fact that the good writers will produce several drafts before the final version. The training cost for the staff would be less than the consultants and would help build management skills and self confidence. Build good writing skills requires management support.

The lack of a good management trainee pool becomes apparent when IT shops try to promote developers and analysts into non-technical or managerial positions. These positions require good writing skills, but many developers don't want to write. If a company wants to promote from within, it must continuously train the non-managerial staff to become better writers.

If colleges want to better educate students, they should incorporate more business writing or technical writing courses in their IT curricula. The acceptance of a project depends on how well one can write the user requirements document. Writing should be placed on the same level of importance as programming. An IT staff unable to write quality documentation can't design quality systems. Managers should support and reward good writers as they do good technicians. This will encourage people to write better documentation and, subsequently, design better, less expensive systems.

870907