
When Buying a New or Bigger Computer Procedural Analysis is the Key

EPNER'S LAW Number 7: "If you automate garbage, all you get is faster garbage." In the past 20-plus years, we have seen this axiom demonstrated in hundreds of companies.

By Steve A. Epner

Too frequently, the move to computerize (or further improve on the use of existing computers), is made by company executives with good intentions but with an end result which does not meet expectations. Everyone hopes that a new computer, or a bigger computer, will solve their problems. This belief spawns an investment decision with the ultimate goal of dramatically improving the operation of the company.

More often than not, this investment decision is not faulty. In fact, in almost all cases, we have found such decisions to be in the best interest of the companies making them. The decision is not bad, but is incomplete. By themselves, computers cannot make things better but instead tend to make matters substantially worse.

The decision to buy a new or bigger computer must be coupled with the decision to lay the foundation for the change. The foundation upon which the final outcome will inevitably rest is a thorough and complete procedural analysis.

A procedural analysis, when performed correctly, will drive the successful design and ultimate use of a computer system. It is absolutely necessary to the successful implemen-



About the Author: Steve Epner is founder of The User Group, Inc., a national computer consulting and automation advising organization based in St. Louis. The User Group provides information and assistance to AWCI members. For more information call The User Group at (314) 532-0110.

A procedural analysis when performed correctly, will drive the successful design and ultimate use of a computer system.

tation of a computer system, yet surprisingly, it is the most neglected element of an implementation plan.

Simply put, the procedural analysis reveals how information moves and is used within an organization. It is a discovery process that tracks the flow of information while documenting and analyzing the procedures that support it. Only a procedural analysis can allow a company, regardless of size, to understand how it can operate with the most dramatic improvements to productivity and, therefore, the bottom line.

Forms Book

Over the years, we have learned that people will write down or print data that is important to them. Our first step is always to create a "forms book"

designed to document how information is used and recorded in the company. Forms in this context include: reports, terminal screen displays, and any other method used to communicate information.

Typically, this process alone reveals how easy it is for a company to lose track of its own procedures. More than once, we have documented processes where top management has believed they were using 30 or 40 forms to record and move information only to find that over 100 forms were actually in use. The total process reveals even more.

In brief, each form or report is documented as to its use. We prepare a flowchart tracing the information flow from its initial creation all the way through to its ultimate storage or destruction. Complete details are col-

The flowchart should represent the total picture of how all information flows even from outside the company.

lected through interviews, not only with managers, but with clerical and other staff.

Company executives and managers are frequently astonished to find how different actual system procedures are from what they were perceived to be. Since we always ask for "completed" forms, we are able to show them how the staff has changed the meaning of fields, and even added new fields, to support their daily processing requirements. This then becomes the foundation for understanding the real information needs of the organization.

It is the details that show how the procedural elements of the system (whether manual or automated) can evolve over time . . . as all systems do. Only the people directly involved will know the current process for the infor-

mation they handle. And while each person will know the process as it relates to their work, they often do not have a vision for the overall picture . . . how all the procedural elements interact to form the total system process.

The Total System Process

The total system process with all of its elements should then be flowcharted to provide a graphic picture of how all information moves from desk to desk, department to department . . . how it is created and what happens to it when it reaches each destination. It must be determined how the information is augmented or supplemented, whether it is by the generation of more forms and reports or by telephone

continued on page 46

continued from page 44

conversations.

The flowchart should represent the total picture of how all information flows even from outside the company. This total picture will at last show bottlenecks and excess paper movement, where changes can be made, and what the best opportunities are for making meaningful improvements. Often, the flowchart will indicate where entire steps can be eliminated along with all of the associated forms and reports.

Sometimes, we find what we call "closet" reports. These are reports or forms which show on the flowchart as being created, but never used. Often they are stacked in a closet for some period of time and then thrown out. Many times they turn out to have been a one time request for a manager which the employee thought was to be a continuing process. Each new employee has been taught the job without ever examining its use.

A procedural analyst with User Group, Inc. notes, "You really learn about a company when you set out to prepare a forms book." The time necessary depends on: the number and complexity of forms; the assistance of the in-house staff; and whether this is updating a previous flow or starting from scratch. It is exciting to watch the staff learn how their total system really works and how obvious the changes are that can be made to make the whole picture brighter.

A procedural analysis provides real opportunities for improving systems and enhancing information flow. With or without computers, these improvements often do not require expenditure of more funds as much as they provide measurable bottom line benefits.

Ideally, a procedural analysis should be performed once every three years so that modification can be made to reflect actual changes in the company. The results of this "system exam" will help a company find the right applications for new technologies and provide clues for streamlining operations. And, when decisions are made to further automate the company, the garbage can be left out on the curbside to be picked up by trash collectors rather than by your computer system.

