SAS AS AN INTERACTIVE INFORMATION MANAGEMENT SYSTEM
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Abstract

Anyone who has been around data processing during the past decade has witnessed the tremendous explosion in the demand for information. This demand, when played against data processing's ability to respond, have often become a source of contention between users and the data processing personnel. The scenario that follows is usually one of varying levels of frustration as data processing, already overloaded, tries to accommodate this latest demand—albeit a major new system, a revision of an existing system, or simply a one-time ad hoc report—often at the expense of other development work.

Nowhere is this dilemma more acute than in the case where the demand is for on-line/real-time information. Resolving this type of difficulty is not always simple, but the mess can often be mitigated by selecting the most appropriate software to do the job. In a growing number of these instances, SAS has proven to be an excellent tool. Here is how SAS resolved the information requirements of one such system.

Background

In late 1979, I was asked to serve as membership chairman for the Association for Science, Technology and Innovation (ASTI), a newly charted independent non-profit organization of professionals who shared a common interest in the management of science, technology and innovation. The purpose of which was information transfer by providing various forums through which topics of special interest could be explored. With 155 initial members, it became obvious that an alternative to the manual maintenance of the club's roll keeping was found. Just the mundane task of preparing mailing labels for monthly luncheons, meetings, and special announcements was mind-boggling.

At the time there was no readily available access to word processing equipment, but we could get access to an IBM 3033 computer which was made available to us after hours. Having established the functional requirements that this system would have to meet, a search of more than eighty software packages was made.

The requirements imposed on this selection process were as follows:

- the software must be simple to use and require minimal development time,
- masterfiles must be flexible and easy to update,
- the software must either have report generator features or quick query capability,
- maintenance must be minimal, and
- the software must lend itself to modular development as new requirements arise.

With these five requirements, a search narrowed down the alternatives to EASYTREV, GIS, COBOL, and SAS. IDMS was briefly considered, but the huge system overhead and developmental time were not within the economies of scale for such a small application. SAS was ultimately selected as offering the best bang for the buck—particularly since the association's data processing budget was zero.

Not only did SAS meet the requirements for data management but it offered an excellent data analysis capability as well.

Within three days, PROC FORMS was spitting out mailing labels and membership listings. Using other procedures (GLM, PLOT, etc.) interesting statistical profiles on the membership began to emerge. File updates and revisions became a simple task with the PROC EDITOR.

As time passed, increased demand for tracking and monitoring other functions such as monitoring accounts payable/receivable, tracking of old business, and other administrative functions. This ultimately led to development of a well integrated little management information system (Figure 1) incorporating some 600-700 lines of SAS code. By setting up CLISTS (and nested CLISTS), interactive processing was just as easily accomplished.
Conclusion

SAS proved to be an ideal tool—simple, versatile and easy to use. And while a SAS based interactive information system may not run as effectively on large complex systems, the small developmental effort expended here certainly proved fortuitous in meeting ASTI's informational needs.
Figure 1

ASTI MANAGEMENT INFORMATION SYSTEM
COMPUTER PERFORMANCE MEASUREMENT AND MANAGEMENT

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