

SUMMARY

A description of some of the achievements and problems that this end-user has faced in an attempt to get sufficient understanding of SAS to produce results that satisfy his needs.

This paper sets out to explain some of the difficulties that face the end-user in the quest for an end result achieved in an acceptable time scale.

Whilst these are the experiences of one person we think that they are sufficiently general to be of constructive use in other situations.

1. EDUCATION "If I was going there I wouldn't be starting from here"  
from Ireland

Mr. Gerry Weinberg, a computer consultant from Nebraska, wrote an article entitled "The 'right' answer may not solve your problem". He explained for analysts the many pitfalls in communications with end-users.

Effective analysis is limited by the amount of useful information that can be extracted from the end-user. There is a tendency for the analyst to be given information that the end-user considers important rather than the whole story. This, and the length of time it takes to produce results tends to make for unsatisfactory end products.

The starting point on the SAS route is very often the experience of finding that the existing systems contain the data but the displays or outputs are not quite what is required at the present moment.

So the momentous decision is made, 'I need to spare the time to be educated in SAS'.

The Information Centre provides two initial alternatives after the 'tea and sympathy', a one day introductory course or access to an on-line self-teaching pack.

Either way, from the initial contact a simple (and I do mean simple, even I found it easy to understand) short report called 'An introduction to SAS' is provided. So the would-be user has something to start on.

Extending Murphy's Law, at the time of enquiry the Monthly SAS Introductory Course; has just run; been cancelled; is full.

The timing of this course is critical. The end-user must receive it early if it is to be useful. It is most disruptive for the students and the instructor to have a vociferous, established hard-bitten end-user in a class of novices. There is though a yearning amongst end-users to be 'taught properly', and whilst the self-teaching pack is quite adequate, I have the feeling that all SAS end-users could benefit from a half-day workshop during their first 6 months.

2. BATCH OR INTERACTIVE "First go catch a terminal" Mrs. Beeton?

Being an engineer and preferring to see what I am doing I elected for the 'Kitchen' method. Near my office is situated a convenient card punch, little used these days. Similarly a remote job entry card reader is available, what could be better! I could punch my cards and run the job, sit back and wait for the output next day.

This proved to be a salutary exercise. The examples in the report were crystal clear, but somehow it would not all go together. The output failed to arrive. Then when it did there were mysterious errors. But I disgress...

The biggest hurdle at that stage was to overcome the reluctance to get involved in something new, on-line time sharing option. Not being a home computer buff, and not having young children to teach me I found that initially sitting in front of a screen addressing this inanimate beast was slightly unnerving. "Will it blow up?!" "What if I pull the system down?!"

Once launched and swimming one asks the innocent question, "Can I have my own visual display unit now please?" only to find out that there is already a queue of several hundred and it must be "In The Plan"

3. THE PROGRAM "We are reaching the end of invention" US Patent Office  
Circa 1900

The arrangement with the Information Centre Staff to run the initial test programs was most helpful. Splashing about in the shallows, seeing how the language worked was interesting and not too time consuming. A disciplined approach was necessary to restrict amount of time 'wasted' on this exercise.

The question that was uppermost at this time was 'How soon will it be before THAT JOB can be tackled?' Gradually the fundamental began to sink in. That colons were not an alternative to semi-colons. That once 'The Beast' found an error then it went its own way and generated its own ideas of what the errors were.

During this period the Information Centre Staff were courteous, helpful and instantly accessible. Being old and grey, relating to young and enthusiastic staff in a meaningful way proved an effort at times. Their vision and simplicity of handling problems was at times intimidating without any such intent on their part. Always the phrase 'Well, to do that you need to use.....' cropped up leading deeper and deeper into the hidden treasures of SAS.

4. THE OPERATING SYSTEM 'What is JCL?' an end-user

In the cold world of Computing and in the kingdom of IBM there is a language called JCL; it has a relationship to Programming similar to that between Anglo-Saxon and English; it is not used in polite circles but is basic to our actions.

Having got to grips with programming in SAS, the next point of motivation is using it for something useful. Suddenly a new education is required, files must be accessed, data read and manipulated, jobs run in sequence.

Like Anglo-Saxon, Job Control Language has been around for a very long time. It has very powerful manipulation features within it which are quicker and cheaper than using a program. All very confusing.

Some knowledge of the control language is required, though most users copy 'something' that works' and use that. The difficulties arise because there is not enough time, space or files allocated and certainly this is best referred to the Information Centre who then often find that the set up being used is not the most efficient anyway. Asking for 4000K of memory for every job and a sort level of 50 is not in the public interest.

It is perhaps here that the expert can be most lethal. Providing command lists, setting up files, 'sorting the job out' and generally confusing the end-user.

5. COMMUNICATION "They're changing the guard at Buckingham Palace" - A A Milne

We are very fortunate in having an Information Centre that is user-friendly. That may be because it is comparatively new and is looking for trade. It is a virtue of the SAS Institute that has rubbed off onto our organisation.

No matter how stupid, obscure, bizarre the problem the staff will attempt to obtain an answer. On one occasion when wrestling with FSEDIT I rang up with my query. A patient young lady noted my problem saying "The person who can answer this will ring you back in fifteen minutes." "Thats that," I thought; but no, fifteen minutes later the answer arrived.

By this time you will have noticed I have graduated onto the SAS Institute manuals, and although daunted by the sheer size of a manual called 'Basics' found the content delightfully informative. Being colour-blind the 'SAS/GRAPH' presentation does not do a lot for me, but it is an amazing publication for a user manual.

One further point is the availability of manuals. So often we end-users have to share, borrow, steal manuals which turn out to be out-of-date or incomplete. The policy of our Information Centre to make information accessible is refreshingly different from some of our past experiences.

6. PRODUCING RESULTS 'No man is an island' John Donne

Users in general and managers in particular have difficulty in understanding why data retrieval is such as imprecise science. "When will you let me have the figures?" elicits the reply, "If my run works, then this afternoon; but if I have the problems I did last week then it will be Thursday." Also, why does the program that has worked for nine months "screw itself up" on the run for the M.D.?

The introduction of SAS has demonstrated for more eloquently the problem than any presentation or computer orientation session. How senior should the SAS end-user be? I feel its a mistake for any manager to look round for the young enthusiastic junior and delegate him alone. Time and again results appear by accident. Perhaps its not a confession to make public, but solutions to problems very often occur this way and I find that often while attending to one problem the solution for another will occur. This is even more true when talking to other end-users and when all said and done its producing results thats important.

All this will no doubt make the researcher smile, because it is the researchers daily task; but in the commercial world dead lines are often considered more important than results!

7. EDUCATION AGAIN "But you never asked"

When you have learned all the manuals, simulated all the operating systems, accessed all the files, and generated a suite of programs to cover your every need, what next?

Industrial companies are protective of their know-how and this rubs off on individuals within a company. Knowledge is power and a tool for bargaining for improved status. It is therefore often difficult to get users who have developed skills and techniques to pass them on. It is, though, incumbent on all that reach a proficiency with SAS in particular that they help and share with others the knowledge they have gained. In this way the whole organisation benefits.

Will SAS flourish? I hope so, because it is releasing the real power of the computer into end-user areas with a versatility that only a tribe of clerks can match.