"Don't You SAS® Me!": Fostering SAS Adoption in an Excel-based Organization

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ABSTRACT

In any organization where people work with data, it is extremely unlikely that there will be only one way of doing things. Things like divisional silos and differences in education, training and subject matter often result in a diversity of tools and levels of expertise. One situation that frequently arises is that of 'code vs. click'; let's call it the difference between code-based, 'power user' data tools and simpler, purely graphic point-and-click tools such as Microsoft Excel. Even though the work itself may be quite similar, differences in analysis tools often mean differences in vocabulary and experience, and it can be difficult to convert users of one tool over to another. This discussion will highlight the potential challenges of SAS adoption in an Excel-based workplace and propose strategies to gain new SAS advocates in your organization.

OVERVIEW OF POTENTIAL CHALLENGES:

To begin with, the SAS programmer and the Excel programmer to some extent speak different languages. To even be able to discuss basic data concepts, it's useful to bridge this terminology gap. Table 1 shows just a few examples:

SAS term	Excel term
variable	column
observation	Row
Merge/join	VLOOKUP()
Proc FREQ	Pivot Table
Substr()	MID()

Table 1 – Examples of terminology differences between SAS and Excel users

[Q: What other SAS terms/concepts have you found Excel users to have a hard time understanding?]

In addition, things that seem very difficult to an Excel user may seem simple to a SAS programmer, which can lead some SAS programmers to dismiss Excel as a lesser tool; it is not, it's simply a different one. A couple examples of things that tend to be much simpler when done in SAS and more difficult using Excel are:

• Merging or joining multiple data sources

• Implementing conditional logic on a series of variables

• Automated processing/summarizing of data using several changing input sources

And, lest we get too cocky as SAS programmers, some things that are instead much more difficult (or impossible!) in SAS and far simpler in Excel are:

- Performing a calculation that uses the value from a cell that is, say, "two columns over and 3 rows back"

- Sharing data or results with others

[Q: What are some other tasks/functions that one tool performs very easily that the other doesn't?]

[Q: What other roadblocks or challenges have you encountered when trying to encourage Excel users to learn SAS?]

SUGGESTIONS AND PROPOSED SOLUTIONS:

Obviously every situation and organization is different, but in general, an attitude of sharing and an honest desire to learn will go far. In my own experience, I have found success with the following strategies:

1. Focus on communication! Use common terms and concepts that users of both tools will understand.

2. Start with baby steps: walk through some very basic SAS commands and procedures and draw from example data that both Excel and SAS can read.

3. Highlight similarities between the two tools, such as arithmetic/logical calculations, number and date formats, and summary tables.

4. Involve others in the learning process: have them walk you through some of their favorite or 'trickiest' Excel functions or processes.

5. Demonstrate the degree of integration between SAS and Excel, for instance by reading and writing directly to/from Excel worksheets. If it is available to you, the SAS Add-In for Microsoft Office can be especially helpful since it quite literally bridges the gap between the two tools.

6. Be open-minded and leave out opinions and dogma about which tool is 'better'. For example, the fact that Excel does not enforce column data typing may make it a poor tool for long-term data storage, but it does provide a lot of flexibility in terms of what data can be grouped within a single column.

[Q: What other strategies have you found effective for fostering adoption of SAS?]

[Q: Have you found resistance to SAS adoption in your own workplace?]

CONTACT INFORMATION

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