

 **MULTITEX**
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Evaluating, Programming,
And Managing
Successful SAS[®] Projects
By Tom Mannigel

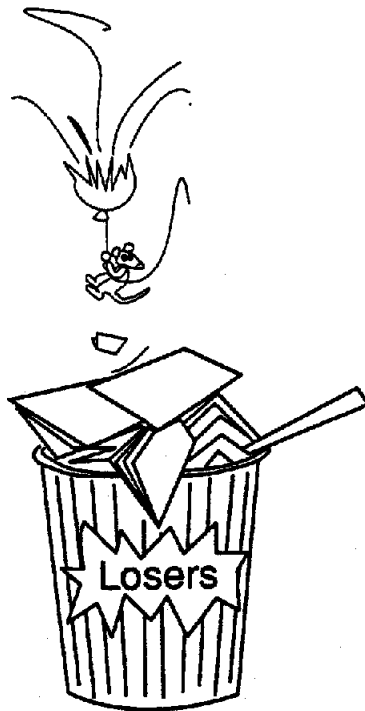
Evaluating, Programming, And Managing Successful SAS® Projects By Tom Mannigel

- I. Evaluating Potential Projects—Four Simple Ways To Get The Most For Your Programming Dollars
- II. Six Ingredients For Successful SAS Projects
- III. The Four Most Common Project Pitfalls And How To Avoid Them
- IV. The Point Where Most Projects Fail And A Simple Way To Avoid That
- V. A Dozen "SAS Programming Tricks of the Trade"
- VI. A Conditional Guarantee That All Future SAS Projects Are Successful

I. Evaluating Potential Projects

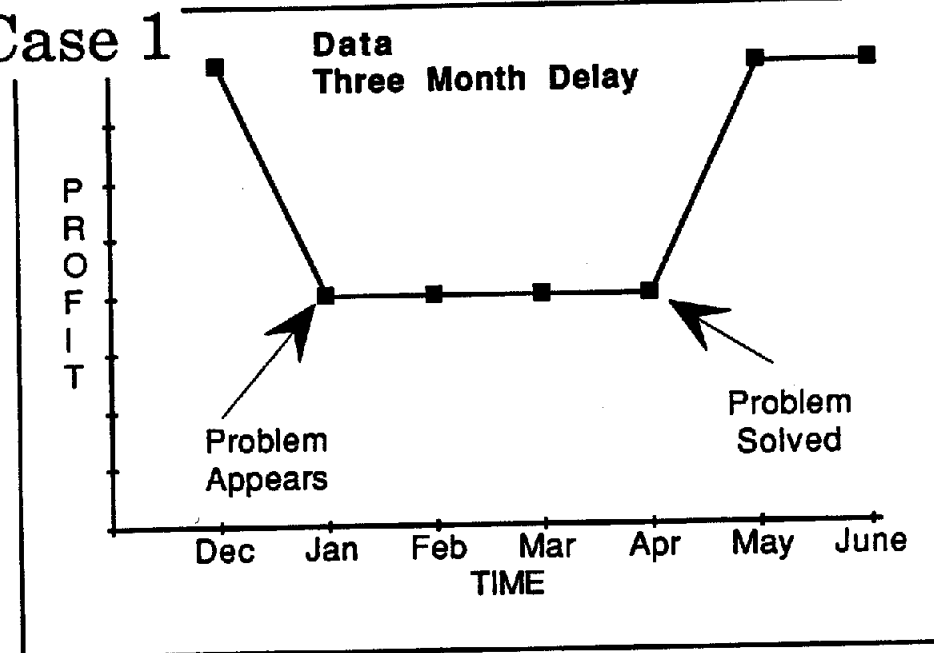
- A. Pay Back Method
- B. Value/Cost Method
- C. Doing The Same Thing Twice Criterion
- D. Timely Data Criterion

Winner

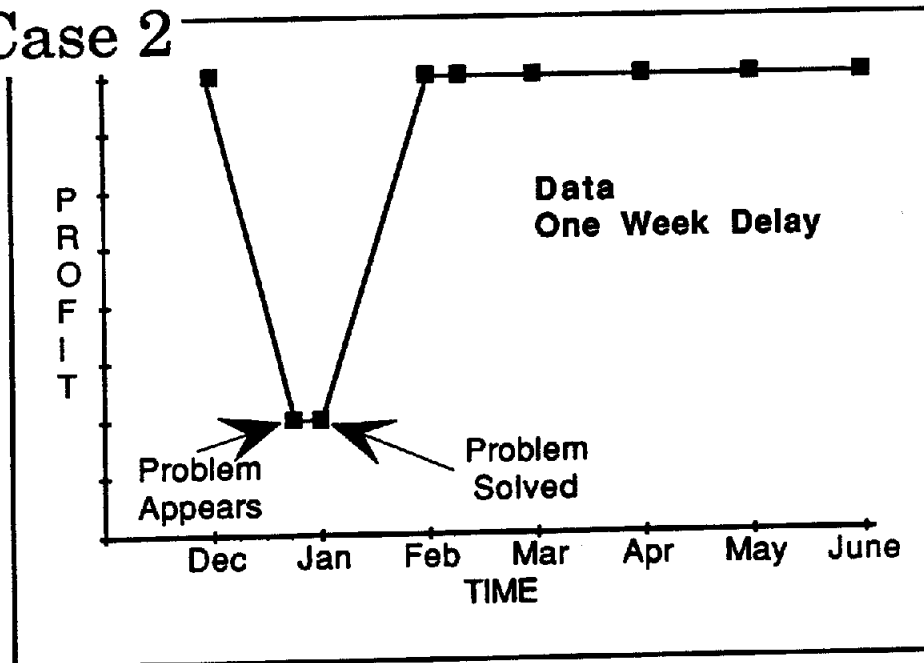


American Med-Texon Utilities

Case 1



Case 2



II. Ingredients For Successful SAS Projects

- A. A worthwhile project
- B. The project is outlined clearly
- C. A healthy programming environment
- D. Good programmers
- E. A good client
- F. Commitment to succeed



II. Ingredients For Successful SAS Projects

A. A worthwhile project

*Questions you need to ask to evaluate
the worth of projects.*

1. Is it feasible?
2. Is it do-able?
3. Is the final product simple?
4. Who will use it?
5. How much training and
documentation will be needed?
6. Will the new system be significantly
better than the old?

II. Ingredients For Successful SAS Projects

B. The project is outlined clearly

1. All inputs and sources of data are identified.
2. What the final product will do is clearly defined.
3. Report layouts are known.
4. *"Be clear about goal and flexible about the process."*—Brian Tracy

II. Ingredients For Successful SAS Projects

- A. A worthwhile project
- B. The project is outlined clearly
- C. A healthy programming environment
- D. Good programmers
- E. A good client
- F. Commitment to succeed



III. Project Pitfalls And How To Avoid Them

A. The Oversell Trap

The client pays for a Cadillac and receives a Chevy.

To avoid—find out what the client wants and if you can't deliver, tell him you can't.

B. The "I know what's best for you" Trap

The client orders a Cadillac and receives a Lincoln Continental

To avoid—Deliver what the client wants.

C. The Enhancement Trap

The client orders a Cadillac and gets a Chevy with lots of options.

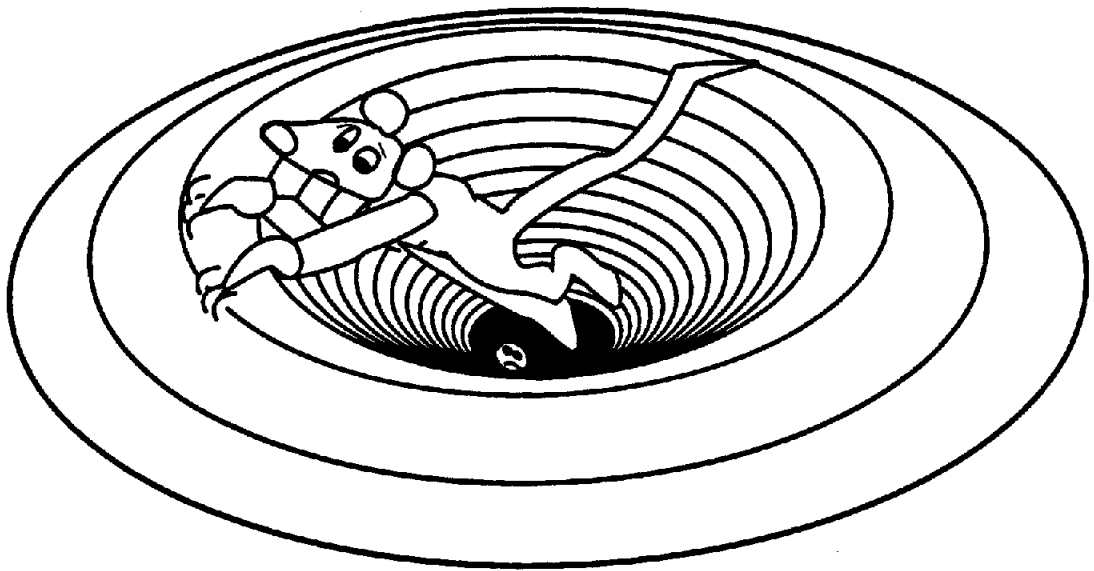
To avoid—No enhancement until the project is done.

III. Project Pitfalls And How To Avoid Them

D. The Overkill Trap

The client needs a wheelchair but gets a custom designed semi-truck.

To avoid—Find out what the client really needs.



IV. A Simply Way To Avoid A Disaster

1. Divide project into sub-tasks.
2. Estimate the time or cost of each sub-task.
3. Calculate the percent of project for each sub-task.
4. Plot this percent versus cost or time for all the sub-tasks as if they were to be completed in sequence.
5. Then, each week estimate the %complete of each sub-task.
6. Calculate the actual %completed from

$$\text{Actual percent complete} = \sum_{i=1}^{\text{Sub tasks}} \frac{(\% \text{complete}) \times (\text{hours to complete})}{\text{total project}}$$

7. Plot actual %complete versus cost to date.

V. A Dozen Programming “Tricks Of The Trade”

1. Macros and %Include
2. Meaningful naming convention for
 - a. SAS variables
 - b. Files
 - c. SAS files
3. Use white space and indentation to document
4. SAS is a treasure chest
 - PROC summary
 - merge
 - PROC greplay
 - by processing
 - macroize puts
 - PROC print

V. A Dozen Programming “Tricks Of The Trade”

5. PROC greplay
6. Structure data
7. BY processing
8. Macroized puts
9. @ on the input statement
10. %varlist
11. Dialog manager user interface
12. The conditional guarantee