

Which Paint Brush Shall I Choose-- Mapping out Your Visualization Plan for Clinical Studies

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ABSTRACT

We are currently analyzing the technologies available for clinical graphics and establish a strategy for which products to use and when.

Products include JMP,R, Spotfire, SAS Graphics and SAS Visual Analytics will be discussed in this paper to map out the best way to collaborate and serve different purpose during a clinical trial study visualization needs.

INTRODUCTION

Visual is from light

What are we looking at

R Shiny, Tableau, Spotfire

What we want to see?

Y axis? Change the range

We are in a small setting and one shop serves all mode, that means we cover all the requests from Taylor to the audience (Who are we serving, Pharmacovigilance, Marketing, Medical Affairs, Regulatory, Publication they each have different standards and habits of viewing results. Presentations for Company executive team or conference in your field is different games also.)

I have also learned that people love to look the way they look, measure the world by their own method. SO it is hard to standardize or to pelase everybody.

Knowing the strength and weakness of each software helps you to strategically design the visualization plan of a study.

WHAT OUR INTERNAL CLIENTS WANT

Within SAS Graphics, have you come up a decision making tree on new adhoc request:

*ODS

*GPLOT

*SGPLOT

*GTL template language

or more point and click way

*JMP

*Visual Analytics

What R and Spotfire are good forIf you need to include source code:

```
data one;  
set two;  
if mix(var1, var2) > 0 then do;
```

Continuation of paper body—after source code. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body.

Figure 1 is a sample figure.

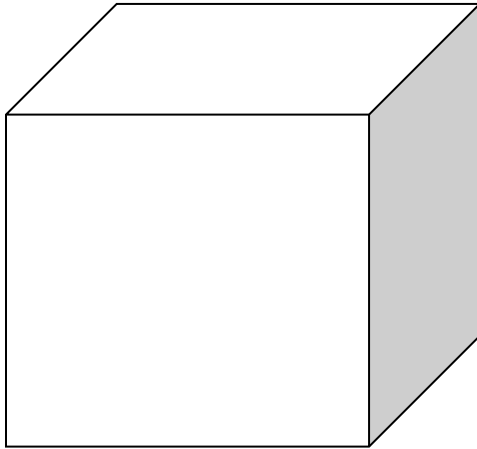


Figure 1. Caption for Sample Figure

Use captions for figures.

SUBHEAD A LEVEL <HEADING 2>

This heading level is for a subtopic of a main topic. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body.

Table 1 is a sample table:

SAS Variable Format	DB2 Data Type
\$w. \$CHARw.	CHARACTER
any date format	DATE

Table 1. DBLOAD Procedure: Default DB2 Data Types for SAS Variable Formats

Use captions for tables.

THE STRATEGY OF ACCOMODATING THE NEEDS

This is a main topic in the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body.

If you need to include a numbered or an ordered list:

1. This is a sample numbered or ordered list item. This is list item text. This is list item text. This is list item text. This is list item text. This is list item text.
2. This is a sample numbered or ordered list item. This is list item text.

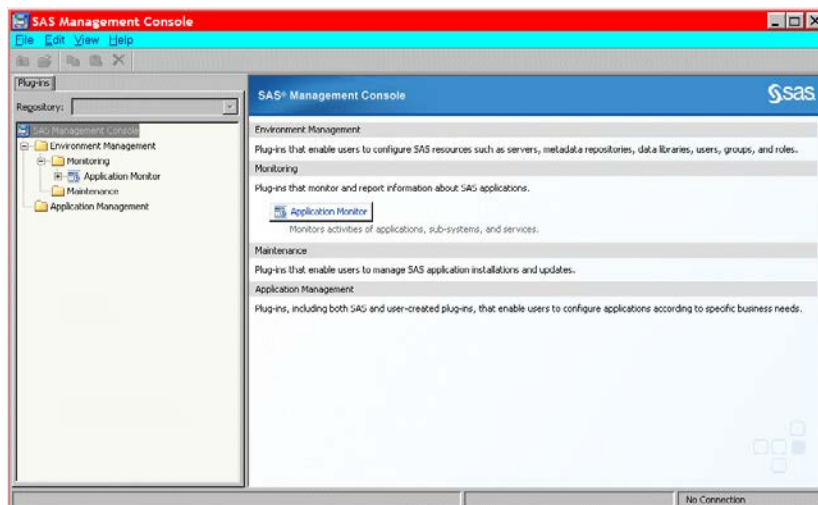
This is the paper body. This is another sample paragraph. This is another sample paragraph. This is another sample paragraph. This is another sample paragraph. This is another sample paragraph. This is another sample paragraph. This is another sample paragraph. This is another sample paragraph.

If you need to include a bulleted or an unordered list:

- This is a sample bulleted list item. This is list item text. This is list item text. This is list item text. This is list item text. This is list item text. This is list item text. This is list item text.
- This is a sample bulleted list item. This is list item text.

Continuation of paper body—after an unordered list. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body.

Display 1 is an example of a display or screen capture.



Display 1. Former Main Interface for SAS Management Console

Use captions for displays.

SUBHEAD A LEVEL <HEADING 2>

This is subtopic for the above. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body.

If you need to include SAS output, this is an example of how to present it:

Output 1 shows an example of how to present output.

```
CREATE TABLE ALLACCTX(SourceSystem varchar(4),
cctnum numeric(18,5) CONSTRAINT "ALLACCT_PK" PRIMARY KEY,
ccttype numeric(18,5),balance numeric(18,5),clientid numeric(18,5),
losedate date,opendate date,primary_cd numeric(18,5),status varchar(1))
```

Output 1. Output from a CREATE TABLE Statement

Use captions for output. Note that output is the same font as source code, but it is in a box. (Not a Text box.)

Continuation of paper body—after output.

SUBHEAD A LEVEL <HEADING 2>

This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body.

Subhead B Level <Heading 3>

This heading level is for a subtopic of a secondary topic. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body.

Subhead C Level <Heading 4>

This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body.

CONCLUSION <HEADING 1>

The conclusion summarizes your paper and ties together any loose ends. You can use the conclusion to make any final points such as recommendations, predictions, or judgments.

This is the text for the paper's conclusion. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body.

REFERENCES <HEADING 1>

This section is not required. Use a bulleted list if you have more than one reference. The references below are examples and do not cover the spectrum of examples that might be included. The important thing is to be consistent in the formatting and organization of your references. If you prefer, you can follow a bibliographic approach such as the American Psychological Association (<http://www.apastyle.org/manual/index.aspx>) or the American Statistical Association (<http://pubs.amstat.org/page/styleguide>).

This is the text for the references.

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Journal article <Author name: last name, first name>. <Copyright date>. "<Article title>." <Journal title>. <page numbers>. <City, State of Publisher>: <Publisher name>

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Web site <Author name: last name, first name>. "<Title>." <Source>. <Date>. Available at <URL>.

ACKNOWLEDGMENTS <HEADING 1>

This is the text for the acknowledgments. This is the paper body. This is the paper body. This is the paper body. This is the paper body. This is the paper body.

RECOMMENDED READING <HEADING 1>

This section is not required. Use a bulleted list if you have more than one reference. This is the format for recommended reading.

- Base SAS® Procedures Guide
- SAS® For Dummies®

CONTACT INFORMATION <HEADING 1>

Your comments and questions are valued and encouraged. Contact the author at:

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Note: Delete this page before submitting your paper.

Source Code Sample

```
data one;  
set two;  
if mix(var1, var2) > 0 then do;
```

List: Numbered or Ordered

1. numbered list item
2. numbered list item
3. numbered list item

List: Bulleted or Unordered

- This is a sample bulleted list item.
- This is a sample bulleted list item.

Output Sample

```
CREATE TABLE ALLACCTX(SourceSystem varchar(4),  
cctnum numeric(18,5) CONSTRAINT "ALLACCT_PK" PRIMARY KEY,  
ccttype numeric(18,5),balance numeric(18,5),clientid numeric(18,5),  
losedate date,opendate date,primary_cd numeric(18,5),status varchar(1))
```

Output 2. Output from a CREATE TABLE Statement

Table Sample

Heading for Column 1	Heading for Column 2	Heading for Column 3	Heading for Column 4

Table 2. Sample Table

Basic Instructions to Insert Captions, Cross-References, and Graphics

These instructions are written for MS Word 2007 and 2010. The steps are similar for MS Word 2003.

To insert a caption:

1. Click **References** on the main Word menu.
2. Click **Insert Caption**.
3. Select the **Label** type you want.
4. Click **OK**.

To insert a cross-reference:

1. Click **References** on the main Word menu.
2. Click **Cross-reference**.
3. In the **Reference type** list box, select **Figure**, **Table**, **Display**, or **Output**.

4. In the **For which caption** list, select the caption you want.
5. From the **Insert reference to** list, select **Only label and number**.

To insert a graphic from a file:

1. Click **Insert** on the main Word menu.
2. Click **Picture**.
3. In the Insert Picture dialog box, navigate to the file you want to insert.
4. When the name of the file you want to insert is displayed in the **File name** box, click **Insert**.