

IN THIS ISSUE

Part I in a Series: Graphics and Computer Technology in Litigation - p. 1

Brief Cases: Does "Swing Vote" Potential Eliminate the Minority Interest Discount? - p. 1

Avoiding Liability During Workout Negotiations - p. 4

Can You Deduct the Cost of That Cleanup? - p. 6

AICPA Sets Dates and Agenda for 1995 Advanced Litigation Services Conference - p. 7

Resource: Bankruptcy Basics for CPAs - p. 7

PART I IN A SERIES

Graphics and Computer Technology in Litigation

BY PETER SCHULMAN, CPA

Editor's Note: This is the first in a series of articles on the use of graphics in litigation services engagements.

Over the next few issues of *CPA Litigation Service Counselor*, we will cover several uses of graphics in litigation consulting. We will start with trial graphs, then discuss analysis graphs, a fairly new but important concept as it relates to litigation consulting.

Much of the information we communicate during the course of our work is not limited to graphs. For example, financial statements, forecasts, and schedules are frequently included in our presentations. We will explore the presentation of textual materials (*i.e.*, numbers and words) along with graphs.

TRIAL GRAPHS—CASE STUDIES

Trial graphs are frequently used by testifying experts as demonstrative evidence. The purpose of trial graphs is to communicate concepts in an elegant way, so that the concepts can be understood as intuitively as possible.

There are four types of graphs generally used in trial: bar charts, line charts, area charts, and pie charts.

Bar and line charts are the chart types used most frequently. There are also combination charts—for example, I sometimes use combination charts which include bars and lines.

The key elements of graphs are data series, axis, and design elements. At a minimum, all graph types require data series, which are the

(continued on page 2)



Graphics

graph elements that represent the underlying data (for example, bars, lines, and pie slices). Also, bar, line, and area charts require x and y axes, the horizontal and vertical lines bordering the plot area. Some three-dimensional graphs require a third axis. Design elements include titles, legends, axes, gridlines, text boxes, lines, and arrows.

BAR CHARTS

To illustrate the use of bar charts, we will look at the case of Flashlight

USA, the exclusive distributor of flashlights in Europe for a major name brand flashlight manufacturer through 1987. In 1988, the flashlight manufacturer changed Flashlight USA's distributorship from exclusive to non-exclusive, and the manufacturer began competing with Flashlight USA. In 1990, the manufacturer terminated Flashlight USA's distributorship. Flashlight USA sued the manufacturer for lost profits damages. We were retained by Flashlight USA, the plaintiff in the case.

Figure 1 represents a forecasted income statement for Flashlight USA. The forecasted income statement in Figure 1 was part of our

foundation for the lost profits claim. Figure 2, a stacked bar chart, is a graphic representation of Figure 1. Note that in Figure 2 the height of each bar represents the gross sales in Figure 1. The bottom "slice" of each bar represents forecasted earnings, as indicated on the legend to the right of the graph. If we were preparing for a case, although the graph in Figure 2 would have been suitable, color would have been better. Color presentations are generally more effective, easier to understand, and more pleasing to the eye than black-and-white presentations.

In the actual trial documents, the bars in Figure 2 were flashlights,

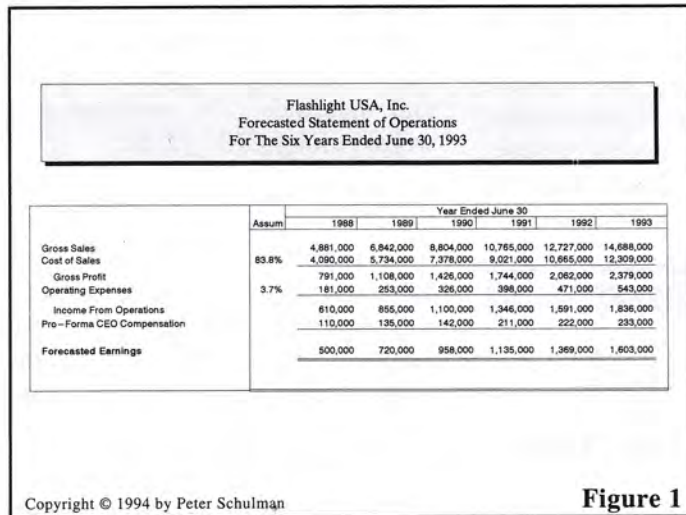


Figure 1

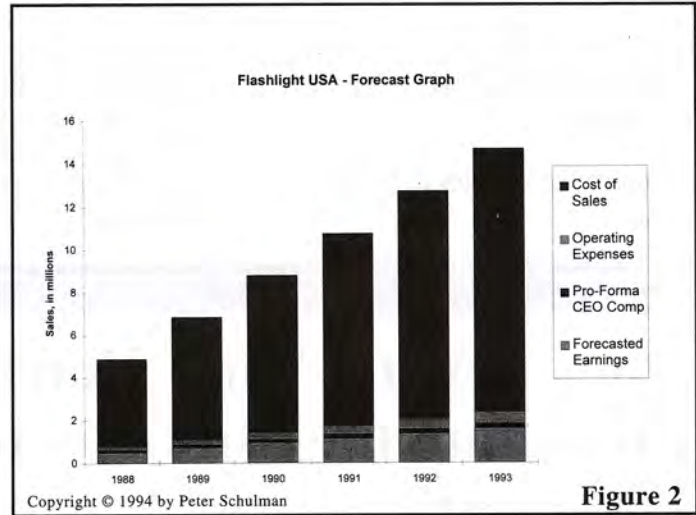


Figure 2

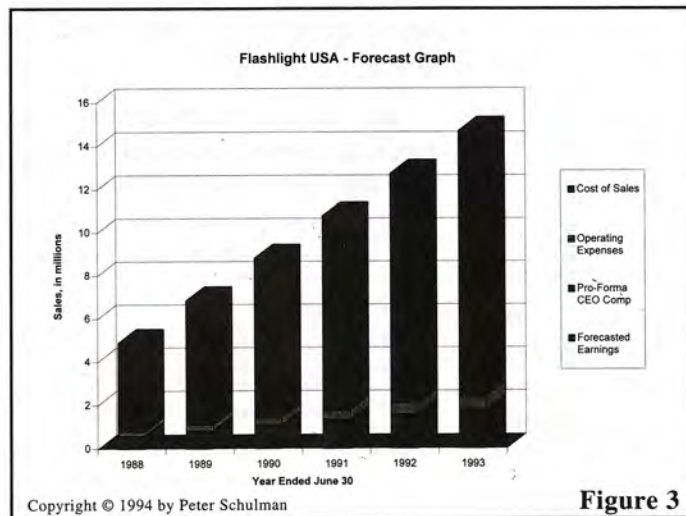


Figure 3

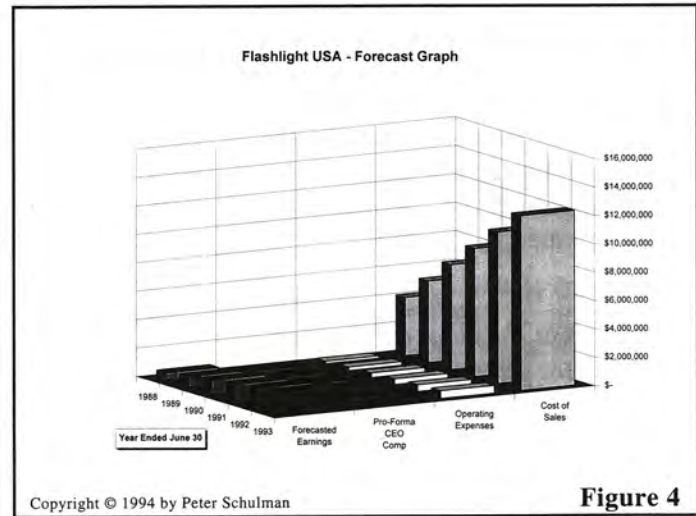


Figure 4

and the flashlight bases represented forecasted earnings. This approach made the graphs more interesting and entertaining for the jury (there were a few chuckles out of the jury box as I explained that the bars were flashlights). We had a similar chart for the income statements where the height of the flashlights represented actual sales, and the flashlight bases represented net income (and losses for the loss years). Each of the two charts had transparency overlays, mounted on steel pegs, which only had the flashlight bases on them. The difference in the height of the flashlight bases on the forecast and income statement graphs represented the damages.

Near the end of my direct examination, I lifted the transparencies off of their respective graphs and placed them on a third graph, which was blank except for the horizontal and vertical axes which were identical in scale to the forecast and income statement graphs. The difference in the height of the flashlight bases on each of the two transparencies was a graphic display of the damages, the difference between forecasted earnings (what the earnings would have been "but for" the alleged damage) and actual earnings. This approach allowed us to

graphically and intuitively communicate the concepts of forecasted earnings and actual earnings and the difference between the two as a measure of damages.

Now let's consider some design alternatives to the bar chart shown in Figure 2. Figure 3 is also a three-dimensional graph of the forecast in Figure 1. One of the interesting aspects of trial graphics is that they are a combination of art and science, and the selection of charts in Figures 2 or 3 is a matter of preference and style.

The elements that give rise to the 3-D effects of the graph in Figure 3 are called non-data ink, primarily because they do not add anything of quantitative substance. Non-data ink is not necessarily bad when used appropriately and in good taste. However, it is important to recognize the existence of non-data ink because it can turn into

"chartjunk," which we will cover in more detail when we discuss graph design concepts.

Figure 4 is an unstacked bar chart. While this graph is not an effective alternative to Figures 2 or 3 for the presentation of the underlying forecast, it could be used to supplement the stacked column chart(s) to explain an individual element of the forecast in relation to the other elements. For example, pro-forma CEO compensation in 1993 was forecasted to be \$233,000. That may sound like a lot to jurors, but the graph in Figure 4 could be used to show what \$233,000 looks like in

(continued on page 8)

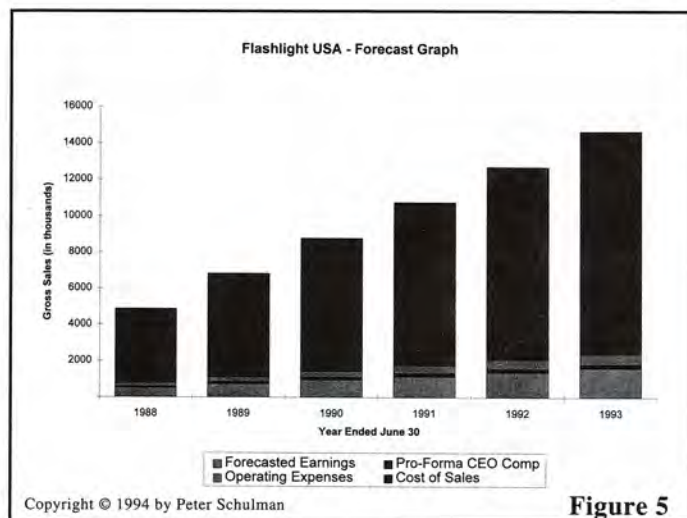


Figure 5

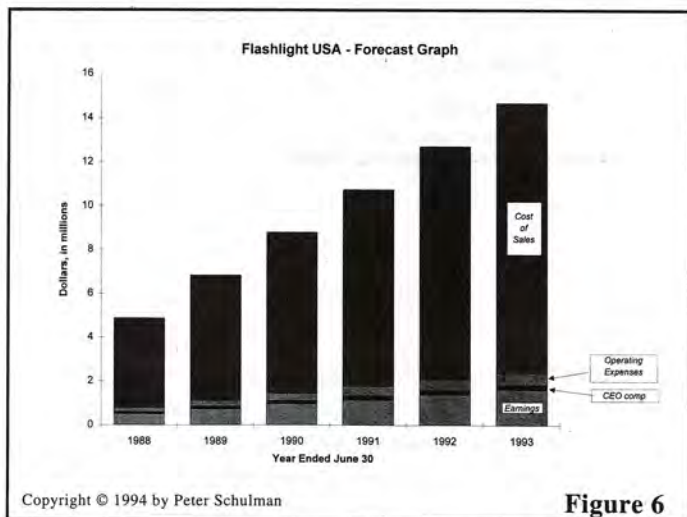


Figure 6

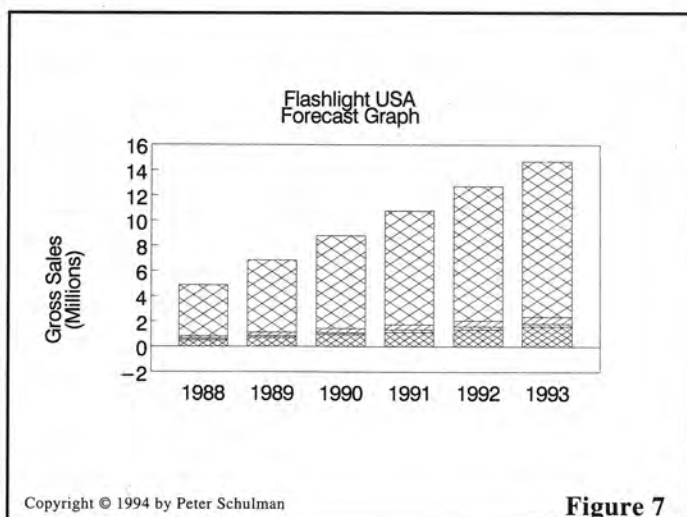


Figure 7

EDITOR
Jeffrey Robert Salins, CPA, CFE
Ellis-Apple & Company
Baton Rouge, LA

CONTRIBUTING EDITOR
Robert R. Blum, CPA, ASA
Blum & Colombe
Waukesha, WI

SENIOR ACQUISITIONS EDITOR
Rick Hammonds

MANAGING EDITOR
Paul Amidei

ASSOCIATE EDITOR
Susan F. Sheehan

EDITORIAL ADVISORY BOARD

James G. Atkins, MBA, CPA, CFE
James G. Atkins & Assoc.
Longwood, FL

Chris Campos, CPA, CFE
Campos & Stratis
Teaneck, NJ

Charles D. Harrell, CPA
Travis Wolff & Company
Dallas

Daniel L. Jackson, CPA, CMC, CFE
Jackson & Rhodes
Dallas

Jim Rigby, CPA, ASA
The Financial Valuation Group
Los Angeles

Ronald C. Russell, CPA, CFE
Mesarvey, Russell & Co.
Springfield, OH

Robert L. Siegfried, CPA
Siegfried & Associates
Wilmington, DE

Wesley N. Stark, CPA, CFE
Stark Tinter & Associates, LLC
Englewood, CO

Alan D. Westheimer, CPA
Houston

A **HARCOURT**
BRACE Professional Publication

TO ORDER CALL
(800) 831-7799

PRICE: \$196 annually or \$358 for two years. Back issues: \$25. ADDRESS ALL CORRESPONDENCE AND SUBSCRIPTION ORDERS TO: *CPA Litigation Service Counselor*, Harcourt Brace Professional Publishing, Journal Fulfillment, 6277 Sea Harbor Dr., Orlando, FL 32887-4600. (800) 831-7799, fax: (407) 363-9661.

EDITORIAL OFFICES: Harcourt Brace Professional Publishing, 525 B Street, Suite 1900, San Diego, CA 92101-4495. (619) 699-6716, fax: (619) 699-6593.

Copyright © 1995 by Harcourt Brace & Company. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage and retrieval system, without permission of the publisher. Requests for permission to make copies of any part of the work should be mailed to: Permissions Department, Harcourt Brace Professional Publishing Division, 6277 Sea Harbor Drive, 8th Floor, Orlando, FL 32887.

Printed in the United States of America

ISSN 1047-5818

CONTINUED FROM PAGE 3

Graphics

relation to the other elements of the forecast.

If we were to take a “do’s and don’ts” approach to illustrating graphics, the charts in Figures 2, 3, and 4 could be “do’s.” Now let’s take a look at some “don’ts,” namely, Figures 5–7. The graph in Figure 5 is the same as the graph in Figure 2 except the legend has been moved from the right side to the bottom of the graph. Bar charts with side legends are easier to understand because the legend contents are in the same order as the slices of the bars. The graph in Figure 6 is the same as the graph in Figure 2 except the legend has been replaced with graphic annotations (text boxes with lines and sometimes arrows). As a general rule, for bar charts, legends are better than annotations.

The graph in Figure 7 is a graph of the data in Figure 1 (quantitatively the same as the graphs in Figures 2–6); however, its visual similarity to the other graphs is almost imperceptible. What are the differences? The finely shaded areas in Figures 2–6 have been replaced by crude cross-hatchings in Figure 7. Attractive fonts (typestyles) have been replaced with large, clumsy, and unattractive fonts. Fine lines making up the various elements of the graph (bars, axes, borders, legend, etc.) have been replaced with crude lines.

How can stacked bar charts of exactly the same data have such a different impact on the viewer? The answer lies primarily in the differences between the technologies used to create the graphs. The graph in Figure 7 was prepared using a DOS

program, whereas the graphs in Figures 2–6 were prepared using a Windows program. Later in this series of articles we will discuss computer technologies, particularly as they relate to graphics and litigation consulting.

STAY TUNED

Part II of this series, scheduled to run in the May issue of *CPA/LSC*, will cover line charts, area charts, and pie charts. ♦