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Clear, Complete, and Concise: Avoiding the Seven Deadly Sins of Analytic Writing

…the most valuable of all talents, that of never using two words when one will do…

—Thomas Jefferson[1]

Introduction

It is not enough to be right. You must also convince others of the correctness of your thinking. A capable manager might find an idea passed over simply because it was not communicated in the best manner possible. In a world where time is the most precious of commodities and you may have someone's attention for just one moment, brevity becomes critical. The ability to be clear, complete, and concise is, therefore, vital to effective management.

While true for all communication, the need to be clear, complete, and concise is perhaps most important for written communication and for analytic writing in particular—writing that conveys a specific conclusion or recommendation arrived at from critical analysis. Typical examples of analytic writing are research reports, technical briefings, position papers, or recommendations for action. The format could be a full report, summary memo, executive summary, or emailed recommendation. Furthermore, other forms of business writing may contain analytic passages and possibly extensive analytic segments. The approach outlined in this note emphasizes objectivity, clarity, and efficiency. The guiding principle is to write to the needs and expectations of the reader.

This note is organized into three sections. The first section identifies and explains the goals for analytic writing. The second section describes the seven deadly sins of analytic writing. These are common errors that violate the guidelines discussed in the first section and impede effective analytic writing. The final section presents one example of analytic writing. The context is a business analysis in which the author must communicate conclusions based on both qualitative and quantitative judgments. The example is annotated to highlight the stylistic choices the author made and to illustrate one possible application of this note's guidelines. Of course, all situations are unique, and you should exercise your own judgment in each.

[1] "Thomas Jefferson to John Minor, 30 August 1814, including Thomas Jefferson to Bernard Moore, [ca. 1773?]," *Founders Online,* National Archives, last modified April 12, 2018, http://founders.archives.gov/documents/Jefferson/03-07-02-0455 (accessed May 11, 2018).

Goals for Analytic Writing

The goals of analytic writing might be summarized as follows. First, the reader should recognize your conclusion or recommendation. Second, he or she should be able to judge the quality of the underlying analysis. Third, the document itself should function as an effective tool for the reader. These goals are straightforward, yet often overlooked. They provide a simple set of principles that can be used to guide stylistic choices. These goals are discussed in more detail below:

1. *The reader should recognize your conclusion or recommendation.*

This should be obvious. But writers sometimes save the conclusion for last, blending conclusions and analysis in a way that makes them difficult to separate, or focus on the analysis as if it were a purpose unto itself. In general, state recommendations at the start and be clear what you are recommending.

2. *The reader should be able to judge the quality of the underlying analysis.*

Writers often focus on describing in detail the analysis that was performed. Recognizing the reader's needs in this context is important. While the document should typically have sufficient detail in some form or place (footnotes, appendices, or exhibits) to allow the reader to assess the details of the work done, this is not the reader's goal. The goal is to form an opinion on the quality of the analysis. Thus, in the interests of swiftness and efficiency, the main body of the document should focus on "why" (why you made a specific recommendation or choice in the analysis), not "what" (what you did to arrive at your judgment or what analysis was performed). You want to focus on your thinking, the nature of your analysis, and the basis of your reasoning. If you overwhelm the reader with information, critical insights and judgments may be lost.[2]

3. *The document should be an effective tool for the reader.*

The third goal is typically overlooked. Do not think of the document as your tool to communicate with the reader. It is the reader's tool for understanding your thinking. For example, the reader may only be interested in your conclusion—so put it first. The reader may be looking for certain key points (initially or at a later time) and wish to skip others—the organization and structure of the document (such as using appropriate headings) should make this easy. The reader may wish to skim the document to obtain an overview and then focus on certain elements—the organization of the document and structure of paragraphs should provide a sense of the whole argument and every part. Finally, the document should be sufficiently well organized so that a reader can efficiently use it to retrieve or review points at a later time.

In general, strive for data-driven recommendations. In this context, the term "data" does not necessarily mean "numbers" or "exhibits." It really means "facts unique to this situation." Broad generalizations without support are rarely useful. These statements might also convey a reluctance to tackle the details of the analytic challenge at hand. Data-driven responses focus on what is unique and important in a given context.

The Seven Deadly Sins of Analytic Writing

These seven deadly sins are not presented in order of importance (no such order exists); they are not exclusive (one can easily err in multiple ways); and they are intended to be humorous (though this is no laughing matter):

[2] Of course, one can be too brief. While short lists can effectively summarize information, a reader will recognize a long list for what it is—an undifferentiated mass of data. You must have some discussion to provide context and to demonstrate the thought and judgment that went into your recommendation.

1. *Extravagance—Too many words*

Keep it simple, clear, and direct. Dense writing will lose your reader. This applies as much to individual sentences as to the whole document.

2. *Gluttony—Too much information*

Focus on your judgment and understanding, not the facts or background. This will also let the reader know that you can identify what is really important. In fact, selective and focused documents convey by their very structure that your judgment is sound. More than anything else, this makes your document a better tool for the reader.

3. *Sloth—Making the reader do your job*

The reader should not struggle to understand what you have done or why.[3] Take the time to write clearly. Make your exhibits professional and easily understood.

4. *Confusion—Lack of clarity or purpose*

Avoid undifferentiated volumes of text, lists of facts without context, or indecipherable exhibits. The document must have text that organizes and arranges the information. Facts do not speak for themselves. Lists are just lists. Well-articulated sentences and well-organized paragraphs provide perspective and an organizing framework.[4]

5. *Anger—Vague or emotional language*

While possibly effective in other contexts, in analytic writing, readers generally favor statements of fact over emotive value judgments without support. "Earnings were terrible" says very little of substance, whereas "Earnings were lower than those of five companies in the same industry" says much more.

6. *Pride—Style over function*

Do not call more attention to yourself and your writing than to the content you are presenting. Complex sentences, fancy diagrams, and elaborate spreadsheets can detract from the core message. Style is a tool, not an objective.

7. *Arrogance—Disregarding instructions*

Whether you have good reasons to deviate from what is requested, or you just overlook minor details such as formatting instructions, failing to deliver what your reader expects demonstrates a degree of disregard toward the reader. Know what is expected and either deliver it or adjust the reader's expectations before you begin.

Clearly, avoiding the seven deadly sins of analytic writing requires some degree of judgment given that these rules often seem to be in opposition. For example, you do not want to make your reader work to

[3] On a more literal level, the reader should not have to squint to read your document—at a minimum, *every single letter or number* should be at least 10 points in size. A common error is to just shrink a whole spreadsheet down until it fits, rather than taking the time to format it so all the numbers are large enough.

[4] Particularly egregious exposition errors include large paragraphs, paragraphs without clearly focused purpose, overly complex sentences, no organization via section headings or formatting choices, and the aforementioned lists of facts without context. Particularly egregious errors on exhibits include unexplained important calculations (providing cell formulas is futile and irresponsible—they don't mean anything in a printout), continuing a table onto another page without including column headings or line labels, and exhibits without labels or explanations.

understand what you have said (sloth), but at the same time, you don't want to waste the reader's time with overly detailed descriptions (pride). You want to use style and structure to make the document a good tool, but you do not want to overdo it. In the end, though, always strive to be concise. Achieve the most with the least.

Analytic Writing Sample

The remainder of this note presents an example of strong analytic writing in the form of a memo from Southeast Consulting Group's Roger Kaye to Blue Ridge Bike and Hike's CEO Bethany Hudson. Blue Ridge Bike and Hike is a retail chain with stores in three Southeast states that specializes in outdoor recreation, particularly biking and hiking. The context is a typical financial challenge: The firm is trying to anticipate its borrowing needs while facing a number of operational difficulties. The memo articulates the details underlying the firm's challenges sufficiently enough that the analysis can be understood and appreciated with little background information.

Clearly, someone in Kaye's situation could generate many other perfectly acceptable documents. You should not view this example as a "template" that should be slavishly followed but instead as a guide or illustration. Each writing task is likely to require a different approach. For this reason, the notations in this example are intended to highlight the choices and decisions the author made rather than the final product itself.

To: **Bethany Hudson, CFO, Blue Ridge Bike and Hike**
From: **Roger Kaye, Southeast Consulting Group**
Re: **Analysis of Borrowing Needs**
Date: **January 10, 2007**

Executive Summary

Southeast Consulting was engaged to provide an analysis of the expected borrowing needs of Blue Ridge Bike and Hike (Blue Ridge) as of year-end 2008. In particular, we were asked to determine whether the current line of credit with National Bank will be sufficient to meet Blue Ridge needs given its plans for future growth. Based on our analysis, it is unlikely Blue Ridge will be able to keep its borrowing needs below the current $500,000 limit while at the same time growing the firm as planned. According to the attached analysis, the expected borrowing will be $607,000 by year-end 2008. Given the constraints on the firm, we believe some form of equity capital also may be required. **A**

The expected increase in borrowing needs is driven by the investments in assets (particularly working capital) that will accompany dramatically increasing sales volumes (20% projected for 2008). **B** The effects of growth will be exacerbated by a decline in inventory turnover from about 5.3 to about 5.0 and an increase in days receivables from about 16 to over 18. **C** While these ratio changes are modest, together they account for much of the increased borrowing needs. One significant constraint is that Blue Ridge does not have much capacity for additional debt—the company's liquidity is generally low relative to its peers', and in 2007, Blue Ridge had already increased its level of long-term debt. **D**

Forecast of Financial Needs E

Borrowing needs were estimated by forecasting the 2008 Blue Ridge financial statements. The results are shown in **Exhibit 1** (Income Statement) and **Exhibit 2** (Balance Sheet). **F** According to this analysis, the company will need $607,000, which is well above its borrowing limit. In general, estimates are based on sales except inventory (based on COGS) and accounts payable (based on purchases). Assumptions are indicated in the attached exhibit. The most important factors in the analysis are the following:

- Income statement ratios are assumed to be consistent with 2007 results. Thus, no change in margins is assumed. Net margins still exceed the industry median, though not reaching the level of the most profitable stores (see the Performance Analysis in **Exhibit 3**).

A The central conclusion is clearly stated at the start.

B Data-driven statements are powerful—whenever you make a statement, think about how to back it up. Data provides readers with a sense of magnitude. At the same time, of course, do not have too much data. This is the most difficult balance to strike.

C You do not need too many significant digits: "from about 16" is actually more digestible than "from 16.35."

D The executive summary identifies critical support for the recommendation. Also, the identification of one important constraint, as opposed to an extensive listing, illustrates the writer's ability to make judgments.

E Notice the structure of the document—there are clear section headings.

F It helps to reference where your work can be found—the reader will know exactly where to go for more detail.

- Days receivables are forecast to be 18, which is consistent with 2007 results. No change from the 2007 outcome is expected, since the 2007 value reflects the gradual shift in Blue Ridge customers to groups and clubs that expect generous payment terms on some purchases. We assume no additional lengthening in days receivables for 2008. Prior to 2007, days receivables averaged about 16 days (see the Performance Analysis in **Exhibit 3**).
- Inventory turnover is forecast to be five times, consistent with 2007 results. **G** Note that inventory turnover declined in 2007 when Blue Ridge added some higher priced and slower selling items to its product lines. Prior to this change, inventory turnover was about 5.3 times.
- Interest expense is calculated as follows. Interest expense for the prior year was used initially. Given that financing needs increased substantially, the prior year amount would not be a reasonable estimate, and the interest expense was therefore linked to the sum of Notes Payable and Long-Term Debt once the initial forecast was completed (the interest rate is assumed to be 10%, which is close to the most recent rate charged by National Bank). Admittedly, this is not absolutely correct since the Notes Payable balance is likely to increase gradually over the course of the next year, but the assumption is reasonable, and the results are not extremely sensitive to this choice.

G One might have written "I assumed inventory turnover would remain at about 5.0 times," but it is best to depersonalize the document as much as possible. Write as though the analysis were presenting itself.

Performance Evaluation

Blue Ridge has a very clear strategy: it puts its stores in more remote areas (low asset investment) and attracts customers through extensive inventory (low inventory turnover), reasonable prices (average margins), and favorable terms (long receivables). Many of the financial ratios reflect this strategy. Furthermore, given the healthy returns on investment, this strategy appears sound. **H**

H As the unit of organization, paragraphs are critical to clear communication—and therefore must be properly structured.

Blue Ridge management should not be surprised at the need for financing. **I** To sustain the increase in sales last year, Blue Ridge made two notable adjustments. First, the firm increased its long-term borrowing from $350,000 to $450,000. Second, the firm lowered its cash balance relative to sales volume. Even with these two adjustments, the firm ended the year with $443,000 outstanding on its note payable, which is quite close to the bank's $500,000 limit.

I Each sentence serves a purpose and is rarely very complex.

Blue Ridge is generally profitable and provides a solid return on invested capital. **Exhibit 3** shows that net margins are close to the industry median (Blue Ridge is at 3.68% in 2007 versus a median of 3.10%), but the return on investments is very high—both the return on assets (12.34% in 2007) and return on equity (30.80% in 2007) are close to the top-performing quartile of firms. The high returns are essentially driven by the high degree of asset turnover for Blue Ridge—mostly in fixed assets, since the company's inventory turnover is a little low compared with peers.

Even though Blue Ridge is profitable, additional financing is needed because the cash flow from operations is simply not sufficient to fund the company's growth. The 2008 results based on the exhibits in the forecast are also included. Below is a summary of the sources and uses of funds. **J**

J This is an example of a table embedded in the document. If it were more complex, it should be an exhibit. It is short, clear and easily understood. Hence, it can be included in the body of the document.

Sources and Uses Summary (in thousands of dollars)

	2006	2007	2008
Sources			
Net income	301	336	417
Notes payable, bank	77	40	164
Term loan	0	100	0
	378	476	581
Uses			
Net change in PPE	123	187	180
Change operating NWC	205	239	351
Dividend	50	50	50
	378	476	581

Note that investments in assets (along with the dividend) meant the firm required about $476,000 and $581,000 in 2007 and 2008, respectively, whereas net income only provided $336,000 and $417,000. The difference is what needs to be financed: a total of $140,000 in 2007 ($40,000 in notes and $100,000 in long-term debt) and $164,000 forecast for 2008 (all in notes).

Alternatives

To limit the amount Blue Ridge will have to borrow on its notes payable, the firm must either reduce its asset needs or seek alternative financing.

Asset Reductions **K**

K Again, notice the structuring of the document—in this case, the use of italicized subheadings.

- Blue Ridge can reduce its growth rate. **L** This reduction could be accomplished by a judicious increase in prices. **M** The price increase would also help with margins. Inventory could be reduced; however, Blue Ridge would risk losing sales and potentially losing some customers.
- Blue Ridge could make adjustments to working capital accounts. Based on the comparison with other outlets, there may be scope to reduce inventory levels. Furthermore, the firm might be able to collect receivables more quickly. The chart below shows the borrowing needs (in thousands of dollars) at various turnover and receivables levels.

L Here and earlier, the writer made judicious use of bullets (or numbering) to help with organization. Of course, you cannot just provide a list without proper discussion: The list is a tool with a specific function. Each item in the list should relate to the topic. Most important, don't go for a "laundry list" of every possible issue. Use judgment and keep the lists as short as possible.

M An example of a very short, clear, and direct sentence. Jefferson would be proud!

Days Receivables

		16	17	18	19
Inventory	**6**	400	437	473	509
Turnover	**5.5**	539	576	612	648
	5	706	742	779	815
	4.5	910	946	983	1,019

Of course, attempts to change these variables may impact sales. In fact, as noted above, the lengthening of receivables was a direct outcome of a shift in customers, and it is a strategy of the firm to attract customers with large inventories. Nevertheless, it should be noted that receivables are large relative to comparable firms—the median firm has about 10 days in receivables. **N** Also notable is that the inventory turnover has a substantial effect on financing needs.

N Another great use of data to drive home a critical point.

Alternative Financing

- Blue Ridge could contemplate additional long-term borrowing; however, the firm already added to its long-term borrowing in 2007, and management specifically noted that additional borrowing of that type may not be feasible. This is not surprising since the liquidity ratios for Blue Ridge are, in fact, quite low relative to competitors though the coverage ratio is about average (**Exhibit 3**). Blue Ridge also has lower equity levels than most firms.
- The same weaknesses in financial ratios suggest the bank would not consider an expansion of the credit limit.
- While not a large amount in any given year, the steady dividend of $50,000 a year is contributing to the need for financing. A firm that is growing rapidly often cannot afford a dividend.

Given the need for financing, the lack of appealing means to reduce assets, and the constraints on additional borrowing, Blue Ridge should contemplate an equity infusion.

Blue Ridge Bike and Hike

Exhibit 1—Income Statement (in thousands of dollars) **O**

	2005	2006	2007	Forecast 2008	
Net sales	5,842	7,302	9,132	11,000	(a)
Total cost of goods sold	3,892	4,957	6,310	7,590	(b)
Gross profit	1,950	2,345	2,822	3,410	
Operating expenses	1,587	1,854	2,257	2,719	(c)
Earnings before interest and taxes	363	491	565	691	
Interest expense	54	72	93	106	(d)
Income before taxes	309	419	472	586	
Provision for income taxes	91	118	136	169	(e)
Net income	218	301	417	387	

Assumptions **P**

(a)	11,000	Target of $11 million per management discussion
(b)	69.0%	Management expected cost as a percent of sales, consistent with 2007 results.
(c)	24.7%	Trend downward, used 2007 % sales
(d)	10.0%	Rate of 10% times borrowings
(e)	28.8%	Percent of taxable income, 2007 rate **Q**

Historic and Forecast Ratios

	2005	2006	2007	2008
COGS % sales	66.62%	67.89%	69.10%	69.00%
Op exp % sales	27.17%	25.39%	24.72%	24.72%
NI margin	3.73%	4.12%	3.68%	3.79%
Sales growth		24.99%	25.07%	20.46%
PPE growth		23.56%	28.99%	21.63%
Operating NWC growth		28.95%	26.18%	30.43%

O When presenting spreadsheet data as an exhibit, care and planning are vital. The exhibit is clearly labeled. It is obvious what is presented.

P Each section of the exhibit is labeled. The reader knows what each part does and how it contributes to the exhibit.

Q All the numbers are set in at least 10-point type; in this case, 11-point. The exhibit is easy to read.

Blue Ridge Bike and Hike

Exhibit 2—Balance Sheet (in thousands of dollars)

				Forecast	
	2005	**2006**	**2007**	**2008**	
Cash	186	209	180	332	(a) **R**
Accounts receivable	252	334	457	542	(b)
Inventory	732	934	1,254	1,518	(c)
Current assets	1,170	1,477	1,891	2,393	
Net property	522	645	832	1,012	(d)
Total assets	1,692	2,122	2,723	3,405	
Notes payable, bank	326	403	443	607	(e)
Accounts payable	379	462	587	707	(f)
Accrued expenses	83	102	152	183	(g)
Current liabilities	788	967	1,182	1,497	
Term loan	350	350	450	450	(h)
Total liabilities	1,138	1,317	1,632	1,947	
Net worth	554	805	1,091	1,458	(i)
Total liab. and net worth	1,692	2,122	2,723	3,405	
Net operating assets	1,230	1,558	1,984	2,515	
Change in operating assets		328	426	531	

Assumptions **S**

(a)	3.02%	Average 2005 and 2006 percent of sales
(b)	18.00	2007 days receivable was 18.27.
(c)	5.00	2007 inventory turnover was 5.03.
(d)	180	Net increase of 180,000, as planned for new outlets
(e)		Plug
(f)	34	2007 days payables was 34.
(g)	1.66%	2007 percent of sales
(h)		Unchanged balance
(i)		Prior balance plus net income less $50 dividend

R Financial exhibits often have assumptions and explanations. Here, the use of footnoting allows the reader to link easily to the explanation.

S The explanations are short and direct, yet easily understood. Notice that the units for the assumptions (e.g., days receivable) are made clear.

Blue Ridge Bike and Hike

Exhibit 3—Performance Analysis **T**

	Industry (recent data)		
	Q1	**Median**	**Q3**
Return on assets	2.87%	8.56%	15.45%
Return on equity	5.12%	17.86%	34.12%
Net margin	1.76%	3.10%	5.42%
Asset turnover	2.02	2.66	3.53
Days payables	27.30	44.80	67.50
Days receivables	8.56	10.21	17.20
Inventory turnover	4.60	6.60	9.40
Quick ratio	0.60	1.20	2.00
Current ratio	1.60	3.21	5.00
Interest coverage	3.22	6.81	9.34
Net worth to assets	36.2%	47.3%	54.7%

	Blue Ridge Bike and Hike			
	2005	**2006**	**2007**	**2008**
Return on assets	12.88%	14.17%	12.34%	12.25%
Return on equity	39.35%	37.35%	30.80%	28.60%
Net margin	3.73%	4.12%	3.68%	3.79%
Asset turnover	3.45	3.44	3.35	3.23
Days payables	35.54	34.02	33.95	34.00
Days receivables	15.74	16.70	18.27	18.00
Inventory turnover	5.32	5.31	5.03	5.00
Quick ratio	0.56	0.56	0.54	0.58
Current ratio	1.48	1.53	1.60	1.60
Interest coverage	6.72	6.82	6.08	6.54
Net worth to assets	32.7%	37.9%	40.1%	42.8%

T This exhibit could have been presented with a landscape page layout and the Blue Ridge results placed next to the industry. But by breaking it in two, it could fit neatly as a portrait layout, which is easily used and referenced while reading the text.