

HOW TO WRITE A WHITE PAPER

by Alex Ragen

EXECUTIVE SUMMARY

WHAT IS A
WHITE
PAPER?

A White Paper is a highly structured argument, intended to convince the readers that your company's product, concept or vision is a critical component essential to the success of their business. It is written to two audiences: the business and the technical.

WHITE
PAPERS ARE
DIFFICULT TO
WRITE

A White Paper addresses two audiences: business and technical. To the business audience, it describes the business problems your product will solve and the benefits it will bring to the enterprise. To the technical audience, it explains in detail how the product will solve these problems.

THE BASIC
MESSAGE

A White Paper's message is always the same:

- Your business faces serious problems which you must address without delay; if you don't, you will be exposed to the dangerous future unprepared.
- We have the solution. You will be safe with us. No one is more qualified than we are; we offer the most sophisticated, advanced, innovative, widely used, tried-and-tested technology in the field.
- Your competitors, who face the same problem, are already addressing these problems, and you should act before it's too late.

Of course, you cannot present the message quite so brutally. This is where your skills as a writer come into play.

A White Paper's structure is always the same:

THE BASIC
STRUCTURE

- On the first page: the front matter and an executive summary, addressed primarily to the business reader: short, succinct, and convincing. Even someone who reads no further will get the message, loud and clear. All of this must fit on one page, no more. This page, the one you are reading now, is an example of the genre (without the logo and the contact information).
- Next, the message is spelled out clearly, step by step, in a carefully-reasoned sequence of argument, example and diagram—no fluff or marketing blah-blah here. This section should not be more than about 6-9 pages. More is less. You must not lose the reader's interest, even for a single sentence.
- Finally, a glossary (if needed) and contact information.

OVERVIEW

WHAT IS A WHITE PAPER?

A White Paper is a highly structured argument, intended to convince the reader that your company's product, concept, and vision are critical components essential to the success of their business.

A White Paper is written to two audiences—technical and business—and has to walk the thin line between their widely divergent attention spans and capacities to absorb “hard” information. Writing a White Paper is usually more difficult than writing a User Guide.

A White Paper is different from a User Guide in many ways:

WHITE PAPERS ARE DIFFICULT TO WRITE

- A User Guide is allowed to be boring, but a White Paper is not.

Your readers are highly motivated to read a User Guide because they have a task before them that they do not know how to accomplish, and unless they read the User Guide or call support or ask their colleagues, they will not be able to accomplish that task. You have a captive audience that is willing to put up with tedious (but necessary) detail and a perhaps less than exciting writing style.

In contrast, White Paper readers may have downloaded the White Paper from the internet at the office and are now trying to find a few free minutes to read it, hoping to get a quick idea of what it's all about. Or a colleague may have asked them to read it and offer an opinion. Or they may have picked it up at a trade show (along with a thick pile of literature from other companies, including your competitors) and are now in their hotel room, working through that pile of papers. The TV, the dinner, and phone all beckon, competing for their attention. You cannot make them pick up your White Paper, but once they have picked it up, you can very easily make them put it down for something else by boring them.

A few points to note about the preceding paragraphs:

- The list of scenarios is not bulleted, because the intent is not to discuss each one individually but rather to create an effect of a list going on and on without end. This is a stylistic point with which you are free to disagree.
- Avoid accusations of sexism by using “they” instead of “him” or “his”. Take care to maintain consistency within a scenario.
- A User Guide tells the reader how to do something, but a White Paper convinces him that that they want to do something.

Consider a magazine ad for a new car (the White Paper) and its owner's manual (the User Guide), and you will better understand this point. Unfortunately, pictures of beautiful young people smiling at you as they pretend to use the product are not in your White Paper toolkit.

- A User Guide describes something real, but a White Paper can describe something more ephemeral—a strategy, for example, or a vision of the future.

It's hard to write intelligently about something that doesn't actually exist.

THE AUDIENCE

THE TWO AUDIENCES

A White Paper has two audiences: business and technical.

BUSINESS

The businessperson will read the first page (maybe, if you don't bore them half-way through) and possibly scan the rest of the White Paper looking for some familiar warm and fuzzy buzzwords.

The businessperson wants to know what the promised benefits are and will rely on the technical person's judgment about whether the product can actually achieve these benefits. You must get the business message across on that first page, forcefully but subtly.

The businessperson wants to know how much it will cost, but don't talk about prices. Leave that to the salespeople. At this point, talk about cost-effectiveness and return on investment. Don't mention any hard numbers.

Take care not to sprinkle too much fluff on that first page: you will not capture the businessperson and you will alienate the technical person.

TECHNICAL

The engineer will (if you have done a good job) read the whole document and make a sincere effort to understand how the product works and how it achieves the promised benefits, and probably linger longer on diagrams than on text.

The technical person wants to know how it works and how the different parts fit together with each other and with what is already in place, how difficult the product is to actually implement, and will want to see at least an overview of the conversion process (if relevant).

This is a real challenge: to engage the technical person's attention without boring or frightening the businessperson.

THE MESSAGES

Here are the most important messages to get across.

YOU HAVE A PROBLEM ...

THE MESSAGE

You have a serious problem, and if you don't solve it quickly, you will be facing the dangerous future unprepared. In fact, you have many problems, not just one. A real nightmare is just around the corner, patiently lying in wait for you, your company and your job.

The world is changing, and your cozy, successful way of doing things is not going to be quite as successful tomorrow, unless you do something very soon. But you cannot do it yourself. The problem is too big, and the whole field is too new for you. You have no experience with these things. There is a new world out there, and you are not ready for it.

... AND WE HAVE THE SOLUTION

But we are ready. We have been thinking about these problems for a long time, and we have the solution to your problem. We can do it quickly. We have the experience you don't have; we have already done it successfully many times. You can try doing it yourself, but you will do a bad job and it will take forever. No offense intended, but we are the ones who really know this subject. You know your business and we know ours.

WHY SHOULD YOU TRUST US?

You will be safe with us. No one is more qualified than we are; we offer the most sophisticated, advanced, innovative, widely used, tried-and-tested technology in the field.

YOUR COMPETITION IS NOT STANDING STILL

What do you think your competitors are doing? Do you really think that they are sitting idly by, doing nothing? Call us soon, before it is too late.

OF COURSE, WE COMPLY WITH ALL THE STANDARDS

The product is interoperable with recognized standards and third-party products that strictly adhere to those standards, but our company's proprietary technology provides enhanced benefits that our competitors are unable to provide.



Note: Emphasize "strictly adhere". This suggests to the readers (even if you don't actually say so in so many words) that there are unreliable companies out there who implement standards in a sloppy, dangerous way that will jeopardize their business: stay away from them.

FORGET ABOUT OUR SO-CALLED COMPETITORS

We don't really have any competitors; this message is best delivered by simply ignoring them. So don't say anything about them, unless you can think of something really, really damning to say, but don't mention any names and make sure that whatever you do say is absolutely true and that you won't end up in court for saying it.

YOU, THE WRITER

YOUR SOURCES OF INFORMATION

You have two audiences, so you have two sources of information: marketing and technical. You are likely to find that they are alternately helpful and annoying. They will give you a lot of useful and critical information. At the same time, they will also attempt to take ownership of the White Paper, in the sense that they will tend to see it as a tribute to their own genius (the technical people are especially prone to this vice). You must resist them. The White Paper is not a tribute to the cleverness of the solution or to the people who thought of it, but to how well it suits the customer's requirements.

When you interview your sources, you will find that there are some who know exactly what they want, are very focused, think in bulleted lists, answer your questions clearly, never stray from the subject and know when the job is done. People like this are a pleasure to work with.

But you will also encounter another person: Today they know exactly what they want, but tomorrow they will be absolutely sure that the only thing they don't want is what they

wanted yesterday. Their thinking and his words are scattered all over the place: they cannot utter two consecutive meaningful content-rich sentences on the same subject. They are constantly tinkering with and “improving” the text, and they want every sentence on every page to say everything—they don’t have the patience to wait for the next sentence. They want you to create structure out of their chaos, and when you do, they tear it down and insists you start again. Unfortunately, you have to work with people like this as well.

MARKETING

The marketing people can help you get a clear idea of:

- what problems the target audience is trying to solve
- whether the readers already know they have a problem, or whether you have to break the news
- the features that any solution “must have”
- why your product has all the “must have” features (and more!), and so solves the problem
- why the competition’s products do not have all the “must have” features, and so do not solve the problem

TECHNICAL

The technical people will help you with the mechanics of the solution. They will help you draw the diagrams and describe the processes.

The White Paper must not emphasize the nuts and bolts, but only recognize that they are there, where necessary.

The technical people will want you to but you must ...
describe every possible combination of hardware/software/protocol etc.	describe only the most important ones, and vaguely allude to the others
emphasize in great detail how cleverly they have solved the incredibly complex engineering problems	just say that the solution is efficient and easy to implement—don’t bore the reader with the details
repeat all the virtues of the solution whenever you mention even one of them	never be overtly repetitive, but try to deliver the message in a subtle and non-intrusive way

PLAIN APPEARANCE

A White Paper is simply formatted and printed. It is meant to look like an internal engineering report. No colors, no fancy graphics, no razzle-dazzle. Its plain appearance is a signal that it is a serious document for serious people.

FONTS

Use a simple (non-decorative) font which clearly distinguishes between:

- o / O (lower- and upper-case “oh”) and 0 (zero)
- I (upper-case “I”) and l (lower-case “el”)
- 1 (one) and l (lower-case “el”)

SIDE HEADS

Use side heads when you can. They let you present both the structure and the body of the White Paper on the same page. Many of the people reading the White Paper will be skimming the side heads, looking for something that interests them. Help them find what they are looking for and what you want them to read.

DIAGRAMS

Use these whenever you have a good excuse to do so, especially when talking about specific equipment or network configurations that are hard to visualize only from text. A diagram should always add information that is not already in the text.

BULLETED LISTS

Use bulleted lists liberally. They are a very effective tool for imparting emphasis and structure, and because bulleted lists are a major feature of every Power Point presentation, you can be sure the reader will copy your bulleted lists when he prepares his own presentation (in effect allowing you to establish the “rules of the game”).

TABLES

Use tables sparingly. They give a document a heavy, “burdened with a lot of boring detail” look, but they are sometimes the best tool at hand.

WRITING STYLE

Keep it serious and to the point. Keep it short. Be interesting and always informative. Don’t repeat things, except in a very subtle way. Remember that in every sentence you must accomplish two tasks:

- convey new information
- convince the reader to go on to the next sentence

HUMOR

Don’t try to be funny. Your readers will not be expecting humor, so it will probably fall flat and worse, confuse. Also, humor doesn’t travel well across cultures. You may end up being offensive when you thought you were being cute.

FOOTNOTES

Don’t. Footnotes frighten people. Use them in documents you don’t really want anybody to read (like your PhD thesis), but not in your White Papers.

COPYRIGHT

If you must have a copyright statement, then put it at the very end. Don't let it interfere with the flow of the document.

STEP-BY-STEP

1. Read all the design documents and presentations.
2. Extract the marketing message from them - this will not always be so easy.
3. Play with the GUI (if there is one) - this will help you understand the target audience.
4. Write the first page of the White Paper and run it past the marketing and technical people.
5. Listen to their comments carefully. Press them for short answers to questions like:
 - What is the problem?
 - What is the solution?
 - Why is our solution better than everybody else's solution?

Remember, you want short answers to these questions.

APPENDIX A — GLOSSARY

The following terms are either used in this document or else are likely to be encountered in a discussion of technical writing.

FLUFF

Text that includes fashionable words with little or no meaning, commonly found in marketing documents and commercial advertising slogans, the intent of which to give the reader a warm feeling of security without actually saying anything substantive about the product. Fluff is a very effective tool in imparting a sense of world-shaking importance to the trivial (like shampoo) or selling products that nobody really needs.

MARKETING BLAH-BLAH

Text that no one takes seriously (because it makes promises so broadly extravagant that only the uninitiated could possibly believe a word of it), so the credibility of any document containing it will automatically be suspect.

AUTHOR

This paper was written by Alex Ragen (alexragen.com).