



TECHNICAL REPORT WRITING FOR ENGINEERS

COMMON PITFALLS

Professor Mike Hounslow, Vice President & Head of Faculty (Engineering), The University of Sheffield: The biggest problem with bad reports is nobody pays them any attention. It might have a very important point in it, but no one knows. It's so muddled, so garbled, who could tell if it's important? I think it's also entirely possible you could just annoy your reader. And as a piece of persuasion, that's not a great idea.

The parts of a report that annoy me most, or the mistakes, are the bits that feel like a speed hump. Suddenly, you get jolted. And most commonly, that's because someone changes tense halfway through a sentence. They were talking about the past, now they're talk about the present, and by the end of the sentence, they're talking about the future. I might be able to work out what they mean, but I've gone through a whole load of needless effort to try and discover, well, was there something in the past that's now different in the present or the future.

And so those simple disciplines of not confusing the reader are very important, and when you don't follow them, it drives this reader nuts.

Jerin Rajan, Electronics Systems Engineer, Jaguar Land Rover: Accurate English is very, very, very important. I can't stress how important it is, especially when we are dealing with customers from all over the world. We've got suppliers from Germany, from India, so we need to ensure that both the parties are happy with the communication level that we use.

Richard Summers, Associate Director, Arup: So many reports go out with actually incomplete information, wrong information. Wrong information in tables and graphs can then lead to the wrong conclusion being made. And that can be the slip of a keyboard. Technical reports always have appendices. These are the last things to be done and brought together. And time and time again, information either gets left out or is poorly presented. There are numerous references to appendices in reports, and if they're not there, it's the most infuriating thing for somebody reading a report.

Rick Arnell, Materials Application Engineer, Rolls Royce: We really struggle at Rolls Royce with acronyms. We've got so many acronyms. Everything is a three-letter abbreviation. And so when acronyms are thrown into reports willy nilly, it's not ideal. It's also really annoying if terms or definitions change halfway through texts. So



there's plenty of words that I could use to describe something, but try to be consistent with what term you use. Otherwise, things get messy.

It's quite important to consider your error. And again, it's something that will typically get overlooked. And in terms of units, as well, things like percentages or absolute values are definitely worth considering.

Maurice Poole, Operations Maintenance Engineer, London Underground:

When you write a technical report, because it's an engineer doing it, one has to be very careful how you word what you think you're going to word, because you deal purely with facts. And you tend to write in summary form because you're expecting people to understand what you're saying. So if you don't get that right, it's bad indeed.

Professor Elena Rodriguez-Falcon, Professor of Enterprise and Engineering Education, The University of Sheffield:

A problem that I find often is in the findings that, if the student or the person who's reporting - they don't work out what exactly they found - that it can be quite annoying.

Ronald Gulliver, Chartered Civil Engineer, Kier Construction: Personally, I find it very irritating to find a report that doesn't start off with a title page telling me what the report is, who wrote it, what it covers, and page numbers. A report is usually more than one, two, three sides long. And what is important is that the reader knows where they are in that report, especially if the report is then being used, for instance, in a discussion about the subject. If the speaker can say, well, if I can just guide your attention to the article at the bottom of page three, you all look at the same article.

The worst thing in any report or any presentation - you've been to lectures - is someone putting up page upon page of facts and numbers. There are times when you need data or you need a chart or a graph to show some particular aspect. That's fine. But there should be a balance between that and the text explaining it. It's a report, not a picture show.

Dr Ziad Azar, Technical Project Manager/Design Engineer, Siemens: The most annoying mistakes in reports for me - it could be different for people, but for me, in my world - is making messy figures where you could get the figure, look at it, don't understand anything. And looking at the title of the figure is - it doesn't explain enough. You try to find the conditions of the result in that figure, then it's missing.