

## How to write an article – Les Labuschagne

Writing an article to submit for inclusion in a journal or conference that has a formal review process can be a difficult and sometimes daunting experience, especially if you are unsure about what is expected. Even experienced and well-respected researchers find that submitting a great article doesn't necessarily happen easily.

This document provides guidelines to authors that will hopefully help simplify the process and make it less intimidating.

### Why write an article?

The very first question that an author should consider is what the motivation behind writing the article is. Abby Day in her book titled "How to Write Publishable Papers" gives four reasons:

1. Because I have to  
If this is the reason, writing the article will be very difficult and will seem like a lot of work. Writing an article should be a passion and not a punishment.
2. Because I want to get ahead  
Research only has value if it is shared with others. When sharing, the author gets recognised and is able to build up a reputation.
3. Because I need to learn through others  
The purpose of submitting a paper is to receive feedback from the reviewers. The feedback should not be seen as criticism but as an opportunity to learn and grow. By incorporating the feedback into the article, the quality of the article can be improved.
4. Because I need clarity  
Writing an article forces the author to structure thoughts and get a message across within a limited amount of words. Putting thoughts down on paper often helps answering the question "what are you trying to say?".

If the answer to this question is to get some free exposure for your company or product/service, chances are the article will not be successful as readers will not get any value from it. Writing an article is one thing, getting people to read it, is another. In an era of information overload, people are selective in what they read. Any article that does not add value will not be read and only adds to the noise.

To be successful, there must be a need to contribute to the body of knowledge in the particular field without expecting anything in return. Writing an article is about giving something to society, not getting something out of it, apart from personal satisfaction.

## Article structure

Every article should have a basic structure as follows:

- Abstract
- Introduction / background
- Body
- Conclusion
- References

The first thing to do is write the abstract. Writing the abstract forces the author to focus on what the main message of the article is. Often authors are trying to squeeze too many concepts into one article. The more time invested in writing a good abstract, the less time required to actually write the article. The abstract sets boundaries to the article and prevents scope creep: allowing more and more concepts to slip into the article.

Once this is done, the structure can be expanded upon. Start by writing the headings and any subheadings that will form the body of the article. The next step is to include a few bullet points under each heading that represent what it is the author wants to convey in that section. At this point the author should review this structure and make sure that the sections and bullet points all contribute towards the main message of the article. This might necessitate a few iterations. Once the basic structure is in place, the writing of the article can begin.

The following information should be contained in each of these sections:

- Abstract  
The abstract consists of 4 sections:
  - Background – what is the area/discipline that the article fits into?
  - Problem statement – what is it that the article is going to address and why is this important?
  - Solution – how is the article going to address the problem? What is the solution i.e. method, process, tool, approach etc.?
  - Benefits – what benefit does the information in this article hold for the reader and the community?

Most readers start with the abstract. The abstract creates an expectation with the reader. If the abstract is interesting, they will continue with the rest of the article. If the abstract is unclear or fails to stimulate interest, most readers will ignore that article.

- Introduction / background  
In this section the first paragraph should put the article into context for the reader so that the reader can understand where it fits in. This is used to establish a relationship with the reader. A common starting point must be established.

The second section should explain the problem and motivate through credible references why this is a problem and why it should be solved. Suggesting a solution to a problem that does not exist will attract or interest few readers. Only if the reader can identify with the problem will they be interested in finding out what the solution is.

The third section should explain the process that was used in doing the research for the article (research methodology). What was the process used to develop the solution? Readers are not interested in “pie-in-the-sky” solutions that bear no resemblance to

reality. The author must convince the reader that a credible, proven process was followed.

The fourth section should give a breakdown of the different sections in the remainder of the article. This will create an expectation with the reader just as looking at a map helps to understand how a destination will be reached.

- Body

The body can consist of various sections. Each section must have a clear “message” and should flow into the next section. The article should form a unit and not just consist of various unrelated topics. It is important to remember that readers are looking for new information/knowledge from an article.

The body should contain a factual explanation of the solution, not just the benefits of the proposed solution. The main goal of an article is to share information and not to create a need with the reader for a product or service. This is the job of marketing material. It is, therefore, very difficult to write an article based on a commercial product or service as this would mean giving away the intellectual capital invested in it.

This section should also lead the reader through the thinking involved in solving the problem. This should be factual, and ideally, should give “proof” to the validity of the recommended solution. Any assumptions made must be mentioned to avoid the article being unnecessarily criticised.

The section should end off with an objective review of the suggested solution i.e. advantages and disadvantages. It is rare that a suggested solution will solve all problems. Discussing some of the shortcomings shows an in-depth understanding of the topic.

- Conclusion

In this section the first paragraph should give a short summary of what the article was about. The purpose of this is to quickly give the reader the big picture in order for the next section to have real meaning.

The second section should give the conclusion made by the author based on the research described in the article. This should not be confused with the summary i.e. what did the author “learn” from it all? This section should answer the question “so what?”

The third section should focus on what value this research has and what the reader should take away from it. What is the benefit of having done this research? Who would be able to benefit from it?

The fourth section should focus on what other research this article could lead to or what aspect lends itself to further research. This shows the reader that the author understands the bigger context of the research.

- References

References are extremely important as these show whether the author is aware of the current thinking in the field as well as what the latest developments are. A formal referencing technique such as Harvard should be used. Many good articles are let down by an insufficient number of credible references. A minimum of 10 is recommended.

Ensure references are current as many new developments could have taken place in the last couple of years.

### General advice

- Articles that are scientific in nature and are to be reviewed should always be written in the third person. Avoid the use of words such as “me”, “I”, “we”, “you”, “they” etc.
- Keep the language formal and avoid using colloquial speech.
- When using abbreviations, make sure that an explanation is provided of the abbreviation before using it in the text. Do not assume that all readers will know what it means.
- If possible, have the article proofread and edited by a professional. It is very difficult to focus on both content and editorial at the same time.
- Including diagrams helps explain difficult concepts. Make sure the diagrams are easy to interpret and compliment the article.

### Why do some articles get rejected?

It is inevitable that some articles will be rejected by reviewers. Some of the general reasons include the following:

- The article does not have anything new in it. Some articles are just a summary of the work of other authors.
- The article is too commercial. The article reads like a marketing brochure i.e. it explains why something is good rather than explain what it is. Readers are interested in the how.
- The article only identifies a problem without making any suggestions about how to solve it.
- The article is unstructured and appears to be a collection of random thoughts.
- The article has too many editorial errors in it.

### Submitting an article

Before submitting an article, make sure that it is in the required format. Read through the article one last time and ensure that all diagrams and tables are included. Follow the submission procedure and make sure that the article is delivered before the due date.

### What criteria do reviewers use in evaluating an article?

Different reviewers will use different criteria. Some of the main criteria used by most include:

- Originality - How original is the topic covered in the article? Is there anything new that has not yet been published before?
- Significance - How significant is the article to the industry / community? Would anyone get any value out of reading the article?
- Technical quality - How sophisticated is the content of the article? Is the information communicated in an understandable manner without insulting the intelligence of the intended audience?
- Relevance - How relevant is the article to the conference / journal? How does it fit into the theme of the conference / journal?
- Presentation – How good is the quality of the article (layout, graphs, diagrams etc.)? Are diagrams readable and do they contribute towards understanding the content of the article?



Any credible conference / journal will usually provide the author with feedback from the review. This is done to help the author learn and improve.

### **Conclusion**

A successful article is one that – once read – provides the reader with knowledge or understanding they did not have prior to reading the article. The art in writing an article is to take a complex topic and explain it in such a way that it is easy to understand. Many articles do the exact opposite.