



Technical Articles: A Tool for Effective Marketing

Executive Summary

As a supplier or manufacturer in the industrial sector, your customers and prospects are information-hungry. They are in search of specifications, application notes, white papers and other technical content relevant to their jobs. You can help meet their need for information by writing and publishing technical articles. Technical articles are a great way to keep your content and message fresh and relevant.

Technical articles offer a number of marketing benefits:

- Well-thought, well-written articles will keep your audience coming back and help build a favorable impression of your company, products and services.
- They will help generate qualified leads and potential sales.
- Search engines will crawl the articles and pick up keywords, increasing the likelihood of achieving higher rankings on search engines.
- GlobalSpec clients can link to articles from their Supplier Marketing Hub on the site.
- Technical articles are versatile marketing and communications collateral. In addition to putting them on your Web site, you can offer technical articles in e-mail marketing campaigns, print them out for trade shows and other events and use them in any regular client communications.

This paper gives you tips for writing technical articles. It offers ideas about how to use them on your Web site and in other communications to increase awareness and generate qualified leads. Writers, marketers and product managers will find the practical approach presented here useful in developing technical articles. Executives can apply the principles to their overall vision for marketing, positioning and lead generation.

Technical Articles Do's and Don'ts

Do

- Make articles educational
- Understand your objectives and audience
- Have a distribution plan

Don't

- Treat articles like advertisements
- Write about a subject your audience already knows
- Continue using articles that are out-dated

How to Get Engineers to Read Your Technical Articles

If your technical articles meet these three criteria, your customers and prospects will much more likely read and respond favorably to them:

1. *Original.* There's no useful purpose in writing on a subject your audience already knows about. Readers want new information and ideas that will help them solve problems, save time and make better use of their resources.
2. *Objective.* If readers suspect you are simply promoting your own products or services at the expense of objectivity and valuable technical content, they will not read your article. You may also harm your reputation. Remember, technical articles are not advertisements.
3. *Interesting.* While deeply technical in nature, your articles must still engage your audience, offer logical structure and, ultimately, "tell a good story." That way, engineers and others, such as media contacts, will actually want to read them.

How to Develop Technical Articles

Here are a number of strategies to consider both before you begin writing and while you are writing to help you develop better articles that serve both educational and marketing objectives.

Define Your Purpose

Questions you should ask yourself early in the process of developing a technical article are: “Why am I writing this article?” and “What is its purpose?”

Technical articles typically have one of three purposes:

- 1) *Technical description of a product and its uses.* For example, define and describe a diode laser and how it is used.
- 2) *Explanation of a concept or idea.* For example, explain the concept of emissivity as it applies to measuring infrared temperature.
- 3) *Description of a process.* For example, explain the process by which a gas moves through a flow meter.

In every case, your purpose will include educating readers, and may include other objectives as well. For instance, one objective might be to write an article that can be published in a trade journal or magazine. In that case, you may need to follow specific content, length or style guidelines of the publication.

Something else to keep in mind when defining your purpose is the end result you want to achieve. While technical articles are meant to be educational, they also are a “soft” marketing tactic. What do you want the reader to do, believe or understand when they finish reading the article? Are you asking readers to take an action or adopt your position? Should they ask for more information on a topic? Knowing the end result you want to achieve will help you shape content and message in the appropriate direction.

Identify Your Audience

Identifying your audience is more than simply saying “customers” or “engineers.” That is only the highest level of audience identification. The more you drill down and really know about your audience, the better you can tailor content to meet their needs. Consequently, the more successful your article will be.

Here are three things to think about to help you get closer to your audience:

- 1) What does your audience already know about the topic you are writing about? What do they need to know that they don’t know yet? The answers to these two questions will help you write to the knowledge level of your audience.
- 2) When introducing new material to your audience, explain concepts they are unfamiliar with. Otherwise, you may lose your readers. Sometimes a glossary of terms or a sidebar with definitions is helpful. It is also a good idea to begin with familiar material before introducing new ideas.
- 3) Anticipate the questions your reader will ask or objections they might raise, and answer them in your article. This doesn’t mean you need to add a Q&A. Rather, list out the questions and answers in your outlining stage and use this list to help create the content of your article.

Choose a Pattern of Development

Most technical, explanatory or persuasive writing follows one of six proven patterns of development. Choose a pattern that conveys the subject matter to your audience in the clearest and most logical way.

1. **Classification** — To discuss a list of parallel items, classify your information by arranging it into groups that share common characteristics. For instance, in a technical paper on various lasers your company offers, you could group the lasers by type, such as carbon dioxide lasers, helium cadmium lasers and nitrogen lasers. When using classification, create groups (and subgroups, if needed) that include a place for every item you need to classify. No items should fit into more than one group.
2. **Partitioning** — Dividing a subject into its major components is called partitioning. It is a useful technique for describing an object, such as a component or product. For example, you might describe a motor by detailing each of its individual parts, such as gearing and housing. A technical description of an automobile could be divided into functional areas: drive train, safety features, emissions control, etc.
3. **Segmentation** — Just as partitioning is useful for describing an object, segmentation is useful for describing a process. A process explains the relationship of events over time. You begin by listing all the events that take place in a process, and then group them into discrete steps. Writing technical instructions is a form of segmentation. Another example would be an article explaining how to increase the flow of gas through a valve.
4. **Comparison** — Comparisons are a great way to help your reader make a decision between two or more options. For instance, you could compare similar components, like users do on GlobalSpec when they review specifications of similar products side-by-side. Use comparison when explaining different approaches for solving a heating or cooling problem. The important thing to remember is to choose points of comparison that are relevant to all items being compared — and also relevant to your audience.
5. **Cause-and-Effect** — The cause-and-effect approach can be used both for descriptive and persuasive purposes. For instance, you might want to help readers understand the effect of increased water flow on pump performance. In this case you are describing a situation that has a cause (increased water flow) and an effect (pump performance). Or you might want to persuade readers. For example, you might persuade readers that using an inferior or older component will cause damage to an engine. When using cause-and-effect, state your claim at the beginning of your article, and then provide supporting evidence.
6. **Problem-and-Solution** — Problem-and-solution approaches are ideal for technical case studies. An article describing how a manufacturer solved a production line slowdown by switching to a faster-drying adhesive on the assembly line can be presented as a problem-and-solution. As with cause-and-effect, you should make the claim at the beginning (identifying the problem that was solved), and then provide supporting evidence and reasoning (the solution). Remember that the problem should be significant to your readers.

The table below summarizes the six major patterns of development used in technical articles.

Type of Development	Common Uses	Example
Classification	Describe a list of similar items	Types of lasers
Partitioning	Describe an object in terms of its parts	Detailed description and specs of a motor
Segmentation	Break down a process into steps	Explain how to control the flow of liquid through a pump
Comparison	Decide among multiple options	Compare product A to product B
Cause-and-Effect	Describe the consequences of an action or event	Persuade readers why a certain design approach is flawed (or optimal)
Problem-and-Solution	Provide evidence and reasoning when discussing solutions to problems	A technical case study on how a product/component solved a problem

Choose a pattern of development based on an analysis of the purpose of your article, your audience and the desired end result.

Plan Visual Aids To Support Your Ideas

Use photographs, diagrams, charts, tables and other visual aids to help readers understand what you are writing about. Photographs can show what an object looks like. Diagrams can show how to do something or how something works. Bar charts, pie charts and tables can be used to represent data or group information.

The table above is an example of a visual aid that summarizes the six patterns of development used in technical writing. It provides support to the text but also can stand on its own for readers who are scanning the page for information. In that regard, visual aids also serve to break up long blocks of text.

Visual aids should be referenced in the text, such as “See Table 1” or “. . . as shown in the table below.”

Use an Introduction and Conclusion

There’s a saying among writers that to get your point across you must do three things: (1) Tell readers what you’re going to tell them, (2) tell them, and (3) tell them what you told them. The use of the introduction and conclusion between the main body of your article gives you an opportunity to do this.

The introduction can be an executive summary or a brief abstract. Its purpose is to let readers know what the longer article or paper is about, the key points covered and the

reason it is relevant to the audience. The introduction must either entice readers to continue or make them realize the article is not intended for them.

The conclusion sums up all the key points, evidence or reasoning contained in your article. It may also include some type of next steps or actions for the reader to take to get more information.

How to Use Technical Articles on your Web Site

The primary way to use technical articles and get the word out about them is on your Web site, where your customers and prospects come to access technical information.

On the one hand, you want to make the articles on your Web site freely available to your customers and prospects, the media and search engines. On the other hand, you might consider some of the content proprietary and require users to register to view it.

Requiring registration (at the minimum a name and e-mail address) to view articles allows you to capture a lead event for follow-up purposes. Any user who is truly interested in the content of your technical article should be willing to register. Others, who may be just 'surfing around', might not register. This will minimize the number of unqualified prospects contacting you.

Options for Sharing Articles with Visitors

Here are a couple of options to consider when using technical articles on your Web site:

- 1) Provide open access to anyone and everyone.
- 2) Provide open access to an executive summary or article excerpts and require registration to view the entire article.
- 3) Even if you do require registration to view articles, don't keep the content behind firewalls where search engines cannot find them. Instead, provide a link to them on your site map or simply re-direct users who register to a page on your Web site that does not fit under the standard navigation scheme.

Article Format

A valuable way to display a technical article on your Web site is including the document as a PDF file. PDF stands for Portable Document Format, an open, cross-platform file format created by Adobe®. PDF documents can be viewed online, printed or saved to the user's computer for later reading. You can also embed links within the PDF, giving readers access to other information you want to direct them to on the Web.

Alternatively, you can use straight HTML to publish technical articles to the Web. Most search engines can read and index both PDF and HTML content.

Other Ways to Use Technical Articles

In addition to publishing technical articles to your Web site, here are some other ways to distribute them:

- Send them as an attachment to e-mail campaigns or provide links in e-mails back to your Web site
- Print and send them to customers and prospects

Technical Articles:

6 Ways to Get the Word Out

1. Publish on your Web site
2. Include in e-mail marketing campaigns
3. Mention in other printed materials
4. Send to media contacts
5. Submit to other Web sites for publication
6. Directly mail to customers and prospects

- Distribute articles at trade shows or other events
- Submit them to other Web sites that publish technical content
- Offer them as a call-to-action in a marketing campaign
- Use them to attract interest from media contacts

Who Should Write Your Technical Articles?

You may be fortunate to have resources in-house to write technical articles. If you do have subject matter experts who can write, you still want someone with editing and layout skills to polish the article and make it a finished product.

If you don't have internal resources, you can hire a freelance technical writer. This route is typically more cost-effective than using an ad agency to develop copy. You'll also likely get better results if you use a writer with strong technical knowledge.

To find a writer, you can look on the Web and ask for references. Web searches for 'freelance technical writers' will give you a number of good paths to explore. Be sure to ask any writer for samples of their work.

Technical Articles on GlobalSpec

GlobalSpec is committed to helping you achieve the greatest possible ROI from your marketing efforts. That's one reason why we encourage all suppliers marketing on GlobalSpec to list technical articles with links back to their Web site.

Because GlobalSpec requires registration to view specific content from suppliers, you will know the name of the company or person reading your article and receive a lead event from GlobalSpec. In addition, the links back to your Web site from an industry-relevant site such as GlobalSpec can help in your search engine rankings. We allow you to feature your technical articles in a dedicated tab within your Supplier Marketing Hub, and feature technical articles in our weekly engineering newsletter, *Techs & Specs* -featuring over 1.3 million engineering and technical readers, the largest circulation of any industrial, technical or engineering-based e-newsletter.

GlobalSpec provides an excellent opportunity for you to improve the awareness, positive associations and credibility of your company and capabilities through the use of technical articles. It's just one of the many components of GlobalSpec's comprehensive online marketing program for suppliers.

Visit www.globalspec.com/MediaKit for more information on GlobalSpec's engineering search engine and complete Internet marketing solution for suppliers. You will also find many examples of technical articles written by suppliers on our Web site at www.globalspec.com/TechArticles.

About GlobalSpec

GlobalSpec is the leading specialized search engine and information resource for the engineering, technical and industrial communities. Engineers and technical buyers regularly use GlobalSpec to search for and locate products and services, learn about suppliers, and access comprehensive technical content on standards, patents, specifications, designs, application notes and more. Suppliers representing their products and services on GlobalSpec gain a comprehensive marketing program designed to promote their brand and generate, track and manage highly-qualified sales leads.

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