

Creating Single-Sourced Information Products

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Until recently, single sourcing has been limited to the process of putting identical information into multiple information products. However, the results of a single-sourced approach need not be identical. You can customize the outputs to contain only the information that is appropriate for the specific situation. This presentation provides a high-level overview to the advantages of single sourcing and how to implement and maintain such a solution.

WHAT IS SINGLE SOURCING?

Single sourcing is the ability to write information once and use it a variety of outputs. When that information is later updated, it can be changed in one place with all outputs reflecting the change.

Debates rage about whether single sourcing is a viable form of technical communication. Opponents argue that certain types of information are not appropriate for all media; people don't read the same way online as they do in print; creativity is stifled; and so on. The points are well-raised, and in many cases quite true, but they should not be leveled against the *concept* of single sourcing, but rather the majority of examples of single sourcing we see today.

Single sourcing should not be limited to using *identical* information in each output form; for example, writing information for a paper manual in Word and then using that same file in Robohelp to generate help topics. Such limitations happen because we think too big—at the document or file level. The power of single sourcing is found in the details—sentences, paragraphs, even procedures can be effectively used over and over again, while changing the “glue” that holds those pieces together for the particular medium, output form, or audience being addressed.

WHY SHOULD YOU SINGLE SOURCE?

Single sourcing is not for everyone. By single sourcing their information, many companies can expect to save a significant amount of money in their documentation and training development costs. However, some companies may not realize such a savings simply due to the nature of the information they are producing.

Typically, single sourcing is a viable option if you:

- Support multiple platforms

- Support similar products
- Customize solutions for your customers
- Support several different audiences
- Require multiple media outputs
- Update the information often
- Translate the information into multiple languages

In addition, single sourcing offers the following benefits:

- Eliminates redundant or repetitive information
- Improves consistency within a documentation set or library
- Reduces the chance for errors because information is not written or updated several times
- Improves productivity of your staff by eliminating repetitive and clerical tasks
- Frees writers to focus on content
- Enables users to customize their own documentation set
- Reduces the commitment you need from technical reviewers who will only have to review a piece of information once

On the other hand, single sourcing requires a significant up-front investment. Often, companies need to continue with the status quo during a conversion to a single sourcing solution, in effect doubling the documentation costs for the transition period. Tools can be quite expensive, both in terms of purchase cost and learning curve. Before jumping on the single-sourcing bandwagon, carefully analyze the cost savings you expect against the initial implementation costs.

WHAT SHOULD YOU SINGLE SOURCE?

The more information you include in your single-sourced solution, the more the solution can work for you. Don't limit the solution to a user documentation or policies and procedures only. Explore the possibilities of using your information in internal and external documentation, in

marketing literature, in training courses (both instructor and CBT), on the web, and so on.

On the other hand, recognize when you are artificially forcing the issue. Some information simply shouldn't be duplicated in many forms. You may still want to include the information in the information architecture, but it will only have one purpose.

WHAT TOOL SHOULD I USE?

If at all possible, you should avoid the selection of a production tool until you have completed your full design. If you choose the tool before designing your solution, you end up designing a solution that meets the constraints of the tool, rather than a solution that meets the needs of your end users.

Keep in mind, however, that single-sourcing tools are still in their infancy. Your design may not be supportable by the tools currently on the market. Unfortunately, tool vendors do not always keep up with our needs, let alone our wish-list. Currently, well-known tools billed as single-sourcing tools are more likely document management systems that return you to the file-level of shared information. Other tools, such as FrameMaker or Doc-to-Help, offer the ability to define conditions at a micro-level for various outputs, but can be confusing or impossible when your conditions exceed half a dozen.

However, tool vendors are continuing to improve their products, and many are quite willing to provide customization assistance for your needs. Although you should not make a final tool choice until later, the cost of these tools and their customization need to be considered when weighing the feasibility of a single-sourced solution.

HOW DO YOU DESIGN A SINGLE-SOURCED SOLUTION?

If you decide to pursue a single-sourced solution, the most important decision you need to make is the level at which you will allow differences in the information. Or, conversely, at what level is the information the same? For example, if you are writing a procedure in which two models of your product differ in only one step, will you decide that the entire procedure has to be rewritten, or will you only rewrite the different step?

With this decision made, you can design the information architecture—the way information needs to be stored and then accessed to build the information products you need. Work the solution from both ends—what information are you putting in and what structure do you want out. Define both the information objects (inputs) and the information products (outputs) so that you can create forms, templates, and style sheets as required. For each

individual output, create “recipes” or maps of the information objects you will use and in what order.

Also design a system of “meta-data” that includes the owner of the information, the information products that reference the information, and keywords that will help creators of new information products locate objects that they might use.

Finally, be sure to test your design in a proof of concept—take a representative sample of your information objects and create short sections of your information products. Make sure that you've accounted for as much as possible before beginning a full implementation.

HOW DO YOU IMPLEMENT YOUR DESIGN?

The key to implementation of a single-sourced solution is to define a process and then enforce a rigid adherence to it. For example:

- Writers must conform to style standards to ensure consistency.
- Every piece of information must be edited to maintain consistency. Without this editing, it is virtually impossible to use individual information objects written by a variety of people to create an information product that sounds as though one person wrote it.
- Every individual output must be generated, reviewed, and tested to ensure that you have defined your conditions, recipes, links and so on correctly.

HOW DO YOU MAINTAIN YOUR SINGLE-SOURCED SOLUTION?

Just as in implementation, the key to maintenance is adherence to process. For example:

- Writers cannot reinvent the wheel. If information already exists, they need to use it, not write another version because they would have approached it in a different way.
- If information needs updating, the owner of the information needs to ensure that the change applies in all cases where the information is used.
- Just because information is easier to update, doesn't mean you should generate new information products with each change. Establish release dates just as you had before.

WHAT PROBLEMS SHOULD I EXPECT?

As with any new technique, you will encounter potential show stoppers. Be prepared for:

- resistance from upper management due to up-front costs
- resistance from your staff in learning new technology and in lost pride of ownership
- technology glitches in not meeting your needs or in your staff being unable to use the technology correctly to start

However, if you adequately prepare for these issues, building in time and setting expectations, you'll find that single sourcing can be a rewarding and ultimately cost and time savings solution.

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