## **Creating ERP Documentation for End Users**

Donna K. Canobbio, Jennifer A. Durbin, Lori K. Spahr

How do you create ERP documentation for your end users? One key is to map the five phases of the ERP documentation creation process to the phases of an ERP system implementation. Phase 1 is primarily for analysis, phase 2 is for the design process, and phase 3 consists of the actual building of the documentation. During phase 4, you should finalize all building and testing of the system. During phase 5, you should research end user trouble spots and continually improve the documentation in those areas.

Your company has just decided to implement an Enterprise Resource Planning (ERP) program, and you have been put in charge of the documentation for end users. Where do you start? How will the implementation process of this complex software affect the creation of the documentation? How can you create documentation that the end users will actually use?

While your task is not a small one, there is good news. You can roughly map the phases of the documentation development to the phases of the ERP software implementation. See the table below for a summary of the phases.

<b>ERP Implementation</b>	Documentation
	Creation
Project Preparation	Analysis
Business Blueprint	Design
Realization	Building
Final Preparation	Final Preparation
Go Live	Research and Improve

In addition, well-designed and well-built documentation can save your company time and money on support costs after the ERP system is in place. It is important to create the entire set of documentation before the go-live date, so there is no time to lose.

### PHASE 1

For the purposes of this paper, we will use the SAP<sup>TM</sup> ASAP<sup>TM</sup> model for implementation. The first phase of implementation is the "Project Preparation" phase. During this phase, your company finalizes its decision to implement a particular ERP system and starts putting together an implementation team.

Now is the time to start building your documentation team. You will need well-organized, experienced writers who work well in teams. Make sure that at least one representative from your documentation team becomes a member of the ERP implementation team. This is important so that the creation of the documentation can be seen as part of the implementation process and so that the two teams can share resources as necessary. Your team should also begin to gather all of the source material that you can find, including any documentation provided by the manufacturer of your system.

### Begin your analysis

Good and usable documentation requires a thorough analysis of the task at hand. According to William Horton in *Designing and Writing Online Documentation*: Hypermedia for Self-Supporting Products, the major components of your analysis should include the identification of users, tasks, and questions, and the beginning of setting objectives. Also during this phase, you will need to decide what medium you will use for your documentation. There are several arguments concerning the relative merits of printed materials versus online, but for documenting ERP systems we recommend an online format, primarily because the linking capability of online documentation lends itself well to the complexities of ERP systems. In addition, online documentation is cheaper and easier to update than its printed counterpart. Your analysis will also enable you to start identifying the features that you will need in your authoring software so that you can begin your selection process.

### Design a workflow process

It is also a good idea to design a workflow process to use as you build the documentation. One of the potential pitfalls in creating ERP documentation is the temptation to assume that the steps you've written are correct because they were provided by the manufacturer, when in reality they may not fit your company's configuration of the system. The "ounce of prevention" is to make certain to include validation (testing), using the ERP system, as a step in the workflow process for all procedures, regardless of their origin.

Your representative on the implementation team can set the stage for getting copies of all of the scripts that will be created when the system is being configured. (On page 9 of SAP Documentation and Training Development Guide: A straightforward approach to planning and developing documentation and training for your SAP project, Kathryn E. Park defines a script as "a

document that describes how the SAP system was configured to meet specific business requirements.") Your representative can also get buy-in from the implementation team on their participation in the workflow process. One example of such cooperation in the workflow might be:

- Implementation team member delivers script to documentation team member
- Documentation team member writes procedure steps and delivers them to implementation team member
- Implementation team member validates all steps and delivers procedure back to documentation team member with any corrections

Of course, it is possible that you will have access to the ERP system so that another documentation team member can validate the procedures. The point is to make sure that all procedures are validated as part of a well-designed workflow process.

#### PHASE 2

The ASAP model calls the second phase of ERP software implementation the "Business Blueprint" phase. During this phase, your company will document its business requirements for the system and create a "visual model of your business' future state..." You can also create a blueprint for the end user documentation.

At this point, you should have completed most of your analysis and should be working on finalizing the selection of an appropriate authoring tool. William Horton calls this phase the "Design" phase and writes that during this phase you should define your topics, decide how you will cluster (group) and link those topics, and specify your media elements. As you work your way through the design, you will want to consider the following tips.

## Use links and searching capability

A good online documentation system does not simply put a printed manual online. When you consider all of the inherent complexities in an ERP system, it makes sense to take full advantage of any linking and searching capability in your authoring tool. For example, you will want to be able to include definitions as hypertext. Also, you may want to set up links to graphics, rather than have the non-configured screens appear as a default. There are many possible applications for links; use them as you find that they are appropriate for your design. In addition, your documentation will be most helpful to the end users if you can make it searchable, perhaps indexed by keyword or title or by other criteria.

# Include errors, problems, diagnostics, and business workflows

Remember that your end users will not only need to know how to perform a task; they will need to know what to do when something goes wrong. For example, users will receive error messages and encounter other types of unexpected problems. With that in mind, it makes sense to structure some of the topics for solution of such problems.

You should also consider including diagnostics in your design. A diagnostic is a sequence of questions and responses that help end users and/or support analysts identify and solve a particular problem.

Another helpful addition to your documentation is the use of business workflows. A business workflow is a series of related topics, presented in chronological order as they occur in your business. An example of a simple workflow might be:

- Create a sales order
- Create a delivery
- Post goods issue
- Create a billing document
- Enter customer payment

In this example, each topic would consist of a list of steps to complete that procedure. The documentation would clearly show these topics as a sequence in a workflow so that the user can see what steps occur before and after each procedure in the business workflow.

### Create templates

In order to keep the look and feel of your documentation consistent and help your users feel comfortable and confident with it as quickly as possible, it is a good idea to design a template for each component of the documentation system. If you have selected and purchased your authoring software, then you can start building your templates even before beginning the third phase of your documentation creation.

Although your company's implementation team is almost certain to customize the ERP system to fit the particular needs of the business, the steps in many of the tasks the end users will perform are the same as, or at least are similar to, standard methods of performing those tasks. This means that it will save you time if your documentation team begins to copy and paste some of the procedures directly from the manufacturer's documentation (or other documentation that you've collected) right into the new templates. These steps may need to be changed, and perhaps a percentage of the

procedures will need to be rewritten altogether, but some may be correct for your company as written.

### PHASE 3

In the ASAP model of implementation, the third phase is called "Realization". During this phase, the implementation team uses the blueprint that they've created to configure the ERP system for your company. This is the time for your team to build the online documentation to match the design that you've created.

According to William Horton, in the phase when you build your online documentation, you should create and test each component, including media elements, topics, and topic clusters. This means that not only should you validate the steps of each individual procedure, but you should also test all of the links and search features, along with any other special functionality within your documentation.

Now is the time to put your good relationship with the implementation team to work by starting your agreed-upon workflow process. As you begin to receive scripts from the implementation team, you can use them to modify any of the procedures that have already been pasted into templates, and you can use them to create new procedures. For the validation part of your workflow process, be sure that the designated testers walk through every step in each procedure that they test.

As you begin building the documentation, don't be afraid to add to your original design if you discover something that will make the final product easier to use, more accurate, or more thorough. Sometimes the best ideas come to light only when you are in the actual building process.

### PHASE 4

In an ASAP implementation, the fourth phase is called the "Final Preparation" phase. During this phase, the company will "... test all interfaces, train all end users, and migrate your business data...". At this point, you and your documentation team should finalize the building of the new online documentation, making sure that everything goes through the workflow process and is validated before the planned "go live" date.

### PHASE 5

This final phase represents your company's adoption and use of the new ERP system. This is when your documentation will be fully tested by the intended audience. In order to ensure its success, don't just sit back and watch. There are a few things that you can do.

First of all, make sure that the end users are fully aware that the documentation exists and that they know how to access it. Second, do some research. Find out what some of the most common user errors or problems are and make sure that those topics are easy to find within the documentation. Expand on them, if necessary. Find out how successful your documentation is in helping the users solve their problems. Keep a list of any trouble spots and figure out ways to improve on those areas. Finally, if the implementation team makes any further changes or additions to your ERP system, make sure to work those topics into your documentation using the same workflow process that you used before. Updating your documentation will be an ongoing process, but the results will be worthwhile.

### REFERENCES

- (1) Horton, William, Designing and Writing Online Documentation: Hypermedia for Self-Supporting Products, John Wiley & Sons, Inc., New York, 1994
- (2) Park, Kathryn E., SAP Documentation and Training Development Guide: A straightforward approach to planning and developing documentation and training for your SAP project, BobKat Press, Sweeny, Texas, 1997
- (3) SAP Web Site, SAP AG, http://www.sap.com/service/asap\_rm.htm, 2000 (accessed 3 January 2000)

Donna K. Canobbio Technical Writer ServiceWare, Inc. 333 Allegheny Avenue Oakmont, PA 15139, USA

Donna K. Canobbio received her B.A. in English from Allegheny College in Meadville, PA. Currently working as a technical writer at ServiceWare, she previously served as a Subject Matter Expert. In that position, she wrote content for ServiceWare's SAP support knowledge base. Before joining ServiceWare, she served as Program Development Manager at Nets, Inc.

Jennifer A. Durbin Subject Matter Expert ServiceWare, Inc. 333 Allegheny Avenue Oakmont, PA 15139, USA (412) 826-1158

Jennifer A. Durbin is currently working on her Web Author and Web Developer Certifications. Before joining ServiceWare, she was co-owner of a software training company where she was a trainer for financial programs and developed training manuals and materials. Her most recent position is SME for Desktop Products, but she was formerly a SME for the SAP financial modules.

Lori K. Spahr Internet Operations Analyst ServiceWare, Inc. 333 Allegheny Avenue Oakmont, PA 15139, USA

Lori K. Spahr received her MBA from the University of Pittsburgh and is currently working on her Web Developer Certification from Pitt. Before her current position, she was SAP Content Development Manager for ServiceWare, Inc. She wrote content for ServiceWare's SAP support knowledge base and managed technical writers writing for the same knowledge base.