



Adapting to Change through an Initiatives Program



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Effective information development teams continually adopt processes to maintain a competitive advantage in today's global marketplace. Many information development groups struggle to meet customer needs while grappling with shorter development cycles, reduced time to market, and tighter budgets.

To meet these challenges, our department of 40 employees, which includes information developers, tools experts, editors, and managers, developed an initiative program that ensures continuous improvement to processes, products, and skill sets for the department and individual contributors while increasing customer satisfaction.

Through the initiative program, our department successfully implemented single-sourcing with XML to shorten development time and lower the cost of producing documents, word-reduction to cut translation costs for all languages, and a customer partnering program to help ensure global customer satisfaction—while continuously delivering high-quality documentation deliverables.

This article presents examples of how the initiative program enabled our department to adapt to challenges, including new requirements for scheduling, deliverables, and translation.

MEETING THE CHALLENGE OF PROJECT SCHEDULES AND MULTIPLE OUTPUT FORMATS

Faced with shorter development cycles and a requirement for multiple output formats, our department launched an initiative to streamline documentation production using an XML authoring environment. In less than one year, we converted documents to XML and moved from authoring in multiple tools (FrameMaker and WebWorks) to single-source authoring in XML. Writers now author in one tool and render to several delivery formats, including PDF and HTML.

Because the XML move was a large undertaking, we divided tasks into several supporting initiatives. Some teams focused on FrameMaker-to-XML conversion, quality testing, template and stylesheet development, upgrading, Arbortext Editor, and XML troubleshooting. Other teams focused on developing training materials and documenting best practices in an XML User's Guide that was published on the department's wiki. Every department member had some participation in the larger XML initiative. Six months after beginning the XML conversion, we

successfully converted our documentation from FrameMaker to XML and began authoring new material in XML.

Benefits of this initiative included reduced software license costs and enhanced tools skills through on-the-job training that give our department a competitive advantage. In addition, with built-in XML stylesheets, writers do not spend time on manual formatting, instead concentrating on content.

We reduced production time by an average of 47.4 percent, providing writers with more time for information-development tasks. With fewer manual processes, there is less risk of error, and writers' troubleshooting time is reduced by 85 percent.

REDUCING TRANSLATION COSTS

To reduce translation costs and time, our department implemented a word-reduction initiative between April 2006 and June 2008. For maximum efficiency, we split this task into several supporting initiatives to create a common glossary, automate translation deliverables, and word-reduce source files.

COMMON GLOSSARY

We developed a common glossary for all product terminology. For each product team, one writer led terminology reviews, enlisting participation from product managers, testers, developers, trainers, and customer support. This effort eliminated redundancies and discrepancies between similar terms and ensured thorough technical reviews of new terms. The result was a unified product glossary that saved translation costs because it was translated once and published universally across products and documents.

AUTOMATION OF TRANSLATION DELIVERABLES

Another team focused on automating desktop publishing (DTP) tasks. In a recent release, our department used automation to eliminate desktop publishing of localized deliverables. For example, after receiving translated XML files from translators, we were able to render 300 localized files into 453 PDF and HTML deliverables in one day, including 321 HTML help systems and 132 PDF guides. We've also automated the generation of translated deliverables, which enables us to simultaneously deliver English and translated documentation.

Percent Words Reduced	Estimated Savings per Language	Estimated Savings for All Languages
10%	\$2,880	\$37,440
20%	\$5,760	\$74,880
30%	\$8,640	\$112,320
40%	\$11,520	\$149,760
50%	\$14,440	\$187,200

TABLE 1: ESTIMATED TRANSLATION SAVINGS FOR ONE WORD-REDUCED DOCUMENT

WORD-REDUCTION OF SOURCE FILES

An additional team of writers and editors researched word-reduction methods and developed techniques that could trim excess words without removing necessary content. Such an effort can achieve exponential economies of scale when multiplying the savings in one product, documentation set, and language across several translated products, documentation sets, and languages.

For example, in March 2006, we estimated the savings shown in Table 1 for word-reducing one 300-page document that contained an average of 240 words per page for 13 localized languages.

Note that these dollar figures are rough estimates. Actual savings depend on factors such as the degree to which translation memory is used, whether the document is receiving its first or second translation, and the nature of the reduction.

To achieve this reduction, our editorial group researched techniques for word-reduction and developed best practices and training materials for department employees. They also created checklists of words and phrases to reduce or delete and listed “talking points” to help writers communicate the benefits of this initiative. Over a span of several weeks, they presented 36 hours of hands-on training to the department.

Our word-reduction effort was divided into two phases. In the first phase, writers used checklists to modify or delete “wordy” phrases in each document. Examples of this type of reduction are shown in Table 2.

In the second phase, editors introduced updated style guidelines to enhance word reduction.

For the first documentation set targeted for word reduction, the initial combined word count was 5,723,238 words. After word-reduction training, writers were able to reduce words in their documents by an average of

28 percent per document. With additional editorial input, writers reduced words further to an average of 37 percent per document, with one writer achieving a reduction of 44 percent.

For the second phase of word reduction, editors evaluated the success by surveying 80 documents. They calculated an average additional word reduction per document of 24 percent, with 16 documents ranging from 19 percent to 56 percent word reduction. This effort resulted in a cost savings of 24 percent for each of 13 localized languages, reducing costs by eliminating weeks of translation effort. This effort also increased profit by enabling translation and sales to new geographies.

UNDERSTANDING CUSTOMER REQUIREMENTS

To meet the challenge of understanding internal and external customer requirements, the department uses several methods to gather information and conduct user analysis. For example, we collaborate with customer-facing groups such as training and technical support, and, as time allows, attend user group meetings and user conferences, provide surveys and questionnaires, create personas, visit customer sites to watch how people use our products, and conduct focus groups and usability tests.

In addition, we started a customer partnering initiative. Our department began the customer partnering initiative by developing an implementation plan. We worked with product management, sales, training, and customer support to gather information about customers, and then we selected customers to represent an appropriate mix of companies, industries, products, and version levels. We contacted these customers, conducted surveys to gain more information, and invited selected customers to join our customer partnering group and participate remotely in our first meeting.

Word-Reduction Target	Recommended Update
as well as	and
at the same time	simultaneously
in order to	to

TABLE 2: ESTIMATED WORD-REDUCTION EXAMPLES

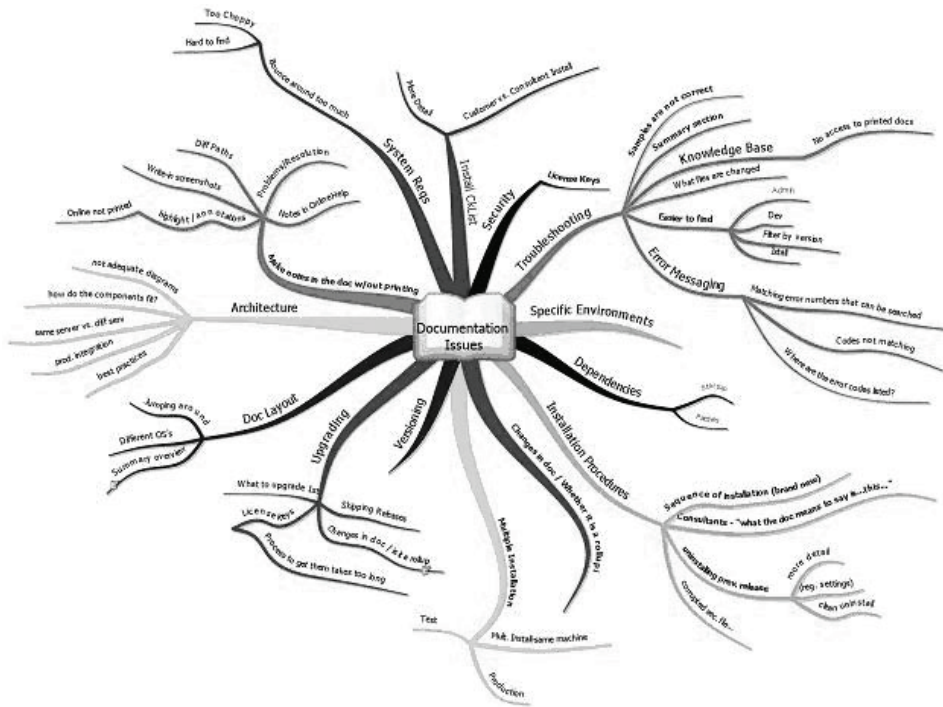


FIGURE 1: BRAINSTORMING WITH THE iMINDMAP TOOL

To prepare for the first meeting, we designed focused, task-oriented activities for the customers, set up the agenda and presentation, and invited participants to a web conference. During the meeting, we presented documentation prototypes to get early feedback, enabling us to incorporate customer input early in the development cycle. To enhance feedback during brainstorming sessions, we used Tony Buzan's iMindMap tool, as shown in Figure 1. After each meeting, we analyzed input to determine action items and sent follow-up communications to customers.

Customer feedback for the customer partnering program has been consistently positive. Comments include "Very worthwhile," "Good use of an hour per month," and "We learn about things that we weren't aware of, as well as what other customers are doing." One customer with a large installation of our products reported that, "We appreciate the effort that has been going into this program, since documentation tends to be something not as well addressed with most software vendors. This [customer partnering program] is very unique, and we feel it is beneficial."

Based on this comprehensive understanding of our customer requirements, we're able to refine the way we meet customer

needs. For example, to support a single, workspace environment that enables customers to perform tasks in multiple products, we developed an "integrated help" system that models the environment. Previously, customers opened multiple help systems to find information. Now, a common help system provides information and answers for all products. Writers generate integrated help using a customized rendering dialog box in our XML authoring tool.

In another response to customer requests, we created an online documentation library. Our initial approach was to create a library on DVD, providing an interface to the content and a search mechanism. The DVD received positive customer feedback, provided a powerful sales and marketing tool, and won two awards from the Society for Technical Communication (STC). Based on additional feedback, we moved the documentation library to the web and included links to best practices, white papers, and tutorials. Customers can now use an overview page to select a release and then access different types of documentation for the release, as shown in Figure 2 on page 4.

Our department created a wiki which acts as a central repository for department information, such as style standards,

templates, and production processes. It also provides access to project management information, such as documentation plans, project schedules, and reviews.

These examples show how our initiative program provides measurable benefits and helps our department adapt effectively to challenges. In the future, we expect to see continued benefits from additional initiatives that are currently underway, such as our investigations of modular authoring, minimalism, and content management systems (CMS).

SUMMARY

The initiative program described in this article enables our department to adapt effectively to changing project requirements, to overcome challenges, and deliver high-quality documentation

on time and within budget. A further advantage of this program is that it enables continuous improvement, allowing us to continually enhance products and processes.

The initiative program also creates communities of practice (CoP) by giving writers the opportunity to collaborate with a wide group of peers, thus strengthening relationships and support team building.

In summary, our initiative program strengthens our department by maximizing our ability to meet project challenges and provide customer solutions. It raises the quality of deliverables and adds demonstrated value to the corporation. It gives us a competitive advantage in today's marketplace, and it positions us squarely to meet the challenges of the future. □

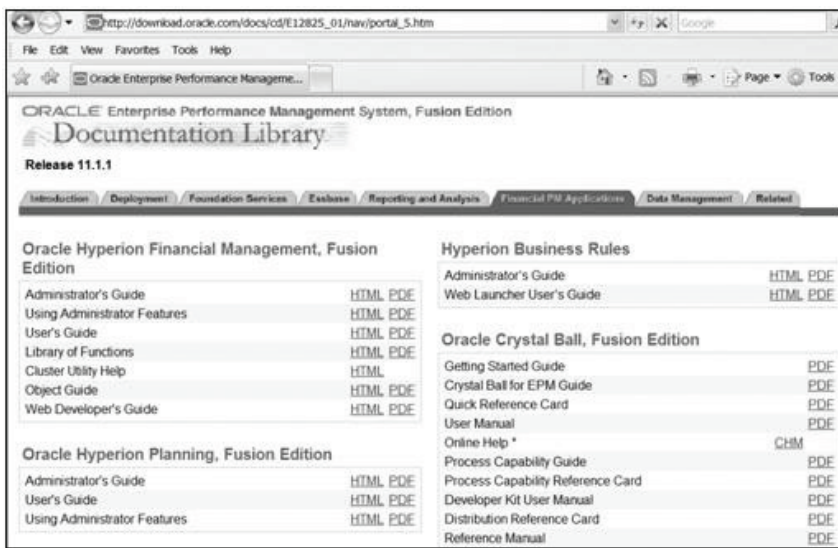


FIGURE 2: ONLINE DOCUMENTATION LIBRARY

REFERENCES

Tony Buzan
 iMindMap
 <<http://www.imindmap.com/about>>