# Chapter 4.14
# Dissemination in Portals

**Steven Woods**
*Boeing Phantom Works, USA*

**Stephen R. Poteet**
*Boeing Phantom Works, USA*

**Anne Kao**
*Boeing Phantom Works, USA*

**Lesley Quach**
*Boeing Phantom Works, USA*

## INTRODUCTION

While there are many aspects to managing corporate knowledge, one key issue is how to disseminate corporate documents with appropriate context. Upon finding an article on a certain subject, for example the material properties of titanium, a reader is likely to be interested in related articles such as applications of titanium or manufacturing methods for titanium parts. Each related article has the potential to increase the reader's knowledge of the subject. Therefore, organizing documents into categories of interest plays an essential role in discovering and interpreting information. Furthermore, categories can be expected to provide historical context, describing how titanium was used in early designs or initial practices used for the repair of titanium parts.

While most large companies make a practice of cataloging and controlling well-established documents, there is a vast set of explicit information that has not traditionally been effectively disseminated. This class of information is less formal and may be exchanged, updated, and otherwise managed at the local level. Such information is usually not controlled at the corporate level or governed by the same organizations established to handle more stable information. Processes to disseminate such information tend to be ad hoc or nonexistent. In this article, we discuss the elements necessary to effectively disseminate informal and explicit information not controlled

at the enterprise level. While the main emphasis of the article is to promote a general process for the dissemination of this type of material in large corporations, we will use a specific implementation of this process at the Boeing Company as an illustrative example.

## BACKGROUND

Traditionally, the dissemination of corporate knowledge has taken a number of different forms. First, there are the methods of classic library science often as implemented by a formal corporate library staffed by trained librarians (Taylor, 2000). This is used for things that are well established such as textbooks, established how-to knowledge on a subject, published papers on a subject, and so on. Second, it has long been necessary to disseminate official policy and procedure through "Command and Control" processes and associated media. In addition, certain industries also require configuration control processes for special classes of information such as product data, drawings, and manufacturing rejection and acceptance documentation. These are all subject to an authentication process, flowing top-down to intended users. A third, extremely important approach to knowledge maintenance and dissemination has been through mentoring and establishment of departments aligned to technical specialties and communities of interest. These approaches are particularly well suited for tacit knowledge. A fourth category of knowledge sharing applies to the communication of explicit knowledge among peers but also includes dissemination to management and other reference groups. This method applies to information that is less formal and frequently ephemeral.

This fourth method is of an entirely more fluid nature and, in some cases, represents the majority of a corporation's explicit knowledge. While it is appropriate for the enterprise to disseminate formal information using traditional, formal means, there is a need to disseminate less formal information as well. This informal knowledge often includes the most current information within a company and without adequate dissemination, corporate decision-making is likely to fall short. In summary, stable and formal information is well handled by existing library or document release systems. Ephemeral, less formal, and generally less controlled content, while important, is currently only shared across the enterprise by a variety of ad hoc means, if at all.

## MAIN FOCUS OF THE ARTICLE

This article focuses on how to systematically share this fourth category of informal and uncontrolled knowledge. The ideal for knowledge dissemination is to make sure information of this type can be well integrated into existing formal content, taking advantage of the context that has been created over time by librarians and other formal content management systems. To achieve this, it is necessary to organize this knowledge in a way that is consonant with the information categories of multiple existing systems. This is made possible by using an enterprise ontology or some form of controlled system of keywords which can be mapped to existing vocabularies. Portals, and other tools which allow content aggregation and term mapping, enable sharing of this knowledge at a physical level. It provides search and simple navigation across sources, as well as security services to restrict access as needed. A central ontology combined with an interactive text classification tool make dissemination of this knowledge possible at a content level.

In the matter of assigning documents to categories, we emphasize the importance of involving subject matter experts. Traditionally, this is done by librarians who are trained to catalog (categorize) content. However, in the case when