Chapter 3

Corporate Wikis: Sharing Information over the Intranet

What is a corporate wiki?

Now that the reader has a basic understanding of wikis, let's move on to the subject of corporate wikis. Corporate wikis have much in common with public wikis. The difference is in the audience. Corporate wikis are designed for use by companies or groups. They are sometimes used by SIGs (special interest groups). Unlike public wikis, corporate wikis restrict access to members of the company or group, unless access is granted by the administrator.

The corporate wiki allows for interaction within the group in a way that general websites or email cannot. Applications vary from one group to another. The simplest use is as a central site for posting information such as documents, articles, and news. Other uses include scheduling, purchasing, planning, and communicating internally within the corporation or group. The corporate wiki can be a powerful tool for project management, as seen in the description of DukeWiki.

Control of access

By definition, a corporate wiki has a limited audience. This means that access to the wiki also is limited. Usually there is an administrator who oversees the operations of the wiki. One of her chief responsibilities is to designate access. Access is referred to as permissions in the Confluence wiki engine used by DukeWiki; that term is used here.

There are two broad categories of permissions. Either access is open within the entire corporate community or else it is restricted, as defined by the administrator. The administrator decides who is included and what they can do. A flexible wiki engine allows an assortment of permissions for various groups and subgroups. For example, a group of writers uses a wiki as a project management tool. No one outside their publishing company can access the wiki contents. Within the group of writers there is permission to create pages, add material, and edit existing material. This same group of writers wants Marketing to have a look at the project. The administrator then gives Marketing permission to read and review the project and to leave comments, but not to change anything. When the writers are ready to submit their work for editing, the administrator grants permission of a wide scope to the editorial staff to allow them to read and revise drafts. Some examples of permissions are: read content, create pages, edit pages, add images, add tables, add comments, review pages, and delete pages. The screenshot shows the View Space Permissions page for the Technical Communication wiki space, using DukeWiki configuration and terminology.

Figure 3-1. Permissions page for Technical Communication Wiki
Examples of corporate wikis

LabLinker, a commercial wiki

LabLinker is available to customers of IDT (Integrated DNA Technologies), a company that provides such supplies as primers to scientists who perform genotyping, in particular those who do PCR (Polymerase Chain Reaction). LabLinker wiki is part of the IDT website and not a stand-alone entity. Only those users who have accounts are able to login to the site. Users may login at any part of the IDT website Integrated DNA Technologies Home and select LabLinker from the toolbar at the top of the page. This takes them to LabLinker Home, where they click on the Get Started bar to get underway.

Each page for a major topic displays a button menu of choices, as seen in the screenshots. The choices are

- Build a Group
- Share (Invite anyone to join your community)
- Search (for content and order status)
- Consolidate Orders
- Discuss, which includes discussion forums and email notifications about orders
- Content Management, which allows customization of the group's home page without the need for software skills.

![Figure 3-3. LabLinker Home Page](image-url)
LabLinker features some major characteristics of corporate wikis. It serves a particular group interest, it is not accessible to outsiders, it allows flexible choices for use, and it promotes a sense of community.
DukeWiki is intended for the use of the Duke University community. Administrators must have Duke NetIDs and groups must have some kind of Duke affiliation. Unlike LabLinker, DukeWiki is not completely closed to outsiders. Some spaces allow reading access by non-affiliates. Most have some sort of restrictions on reading, editing, or space administration.

As of April 7, DukeWiki supports 134 wiki spaces, with more added frequently. Its availability and ease of use have attracted a diverse assortment of users, among them engineering special interest groups, information technology groups, and assorted groups in education and medicine. The spaces range from simple to complex. Just as the complexities of the spaces vary, so do the ways in which the spaces are used. For example, one space is used to organize doctor’s appointment schedules, another to plan campus events, and another to organize an entry into a robotics competition. Among the most prominent spaces are the Smart House space and Nikipedia, the wiki for the Nicholas School of the Environment.

DukeWiki is designed to be user-friendly, and it succeeds for the most part. Setting up a site is a straightforward process. Basic organization is simple and flexible. Formatting is also simple but limited by its settings and the wiki markup. DukeWiki is a markup-optional site. There is a plain-English WYSIWYG text editor that edits in rich text. Users have the option of working in wiki markup if they so choose. For those who have HTML skills, there are options to enhance the design of the wiki space to emulate a regular web site.

The design of DukeWiki does have some limitations. Those who use the basic space layout will find their choices limited. Also, while the space offers various options in content management and page design, DukeWiki help tends to be rather sketchy, occasionally leaving users to figure out procedures for themselves.

A brief history of DukeWiki

DukeWiki was created for the Duke University and Medical Center communities to share information and organize activities. Confluence.oit.duke.edu was the model for and predecessor of DukeWiki. OIT (Office of Information Technology) began testing DukeWiki in October, 2006. Upon completion of development and testing, phase 1 of wiki.duke.edu was released to Duke University, effective July 31, 2007. It is powered by the Confluence wiki engine, version 2.5.7. General DukeWiki space pages retain the same structures as for group spaces, making it possible to track revisions and page histories.

About Confluence wiki engine
Confluence wiki engine is a product of Atlassian, a software company founded in 2002 in Sydney, Australia. The name is a reference to Atlas, the Titan who supported the world. The company is self-described as "an Australian software company specializing in collaboration and development tools" (company website). Confluence was launched in 2004 as a Java-based wiki engine designed to facilitate the group process. It incorporates a number of features to allow sharing and editing content by permitted users, tracking changes, and communicating with group members.

How to use DukeWiki--an overview

One of the outstanding features of DukeWiki is ease of use. It is easy to set up and administer spaces by following the directions in DukeWikiHelp. Options for permissions and for space setup are flexible and varied. A person or group can get underway with a minimum of technical knowledge.

The following is a brief synopsis. Detailed instructions are available on the DukeWikiHelp page and in the Notation Guide, which pertains to wiki markup:

DukeWiki Home, Notation Guide

- How to request a page
  The first step for users is to request a DukeWiki space. Requestors must be affiliated with a Duke academic or administrative department, with a Duke academic course, or with a recognized student organization. DukeWiki Help links to the Space Request Form, as does the OIT website (Space Request).
- How to set up groups and permissions
Figure 3-9 Space and group management choices

Figure 3-10. Space administration

Figure 3-11. Group management
At least initially, the space requestor is the administrator. To access group management settings, click on Browse Space, located in the upper-right corner of any page in the space. The next page displays several tabs (Figure 3-9). Click on Manage Users/Groups to access directly, or click on Space Administration (Figure 3-10) and then click on Manage Users/Groups, as listed under Security. Either path leads to the Custom Space User Management Plugin (Figure 3-11), which has boxes to add groups and specify members of the groups. A useful feature of DukeWiki is that multiple groups are possible, each with a different definition and a different set of permissions.

- Once the groups are set up their permissions should be defined. Click on Space Administration and then select Permissions under Security. This displays View Space Permissions (see Figure 3-1 in prior section). For each group, select Edit Permissions and check off desired options, such as viewing contents, creating and deleting pages, comments, and attachments, and administering the wiki space. DukeWiki also allows anonymous access by outsiders if the administrator so chooses.

- How to edit personal settings

![Figure 3-12. Personal settings](image-url)

When a user is logged into DukeWiki, each page displays his name and preferences as clickable links at the top right. Selecting either link takes the user to View Profile (Figure 3-12), which displays User Name, Full Name, and Email. Click on Edit Profile to edit user details, password, and preferences for email updates.

- How to use the Dashboard
The Dashboard is the master page for DukeWiki navigation. It links the user to publically accessible spaces and other spaces to which they have access, links to recently updated spaces, allows the user to select and display favorite spaces, and links to DukeWiki Help, Space Request, and People Directory. Dashboard is accessible from any DukeWiki page as the leftmost breadcrumb at the top of the page.

- How to add and organize pages
  To add a page to any space, click on the Add Page icon on the upper right, type a name in the New Page box, add content or not, and click on Save. The page becomes a Child and can be displayed in a hierarchy. Additional Children can be added in two ways, either by clicking on Add Page as before or by clicking on the Add Child Page link that is now displayed. To assign a Child to a different Parent Page, open Edit and then click on the small shaded EDIT box under the page title. Click on the magnifying glass icon beside the current Parent Page to open the Choose a Parent box and select a new Parent, and then click on DONE.

- How to edit pages

Figure 3-14. Edit mode

DukeWiki was created for the Duke University and Medical Center communities to share information and organize activities. Confluence.oit.duke.edu was the model for and predecessor of DukeWiki. CIT (Office of Information Technology) began testing DukeWiki in October, 2006. Upon completion of development and testing, phase 1 of wiki.duke.edu was released to Duke University, effective July 11, 2007. It is powered by the Confluence wiki engine, version 2.5.7. General DukeWiki space pages retain the same structures as for group spaces, making it possible to track revisions and page histories.
Click on the Edit button near the top of the page. This opens the WYSIWYG editor in Rich Text (Figure 3-14). Content is displayed and can be edited in plain English without the use of wiki markup. Markup is available as an option (Figure 3-15) and offers more features to the writer. Format choices are simple and limited. Among the most important are bold, italic, underline, paragraph and headings, insertion of tables, lists, insertion of links, and insertion of images. The Preview button displays the appearance of the edited page prior to saving. When editing is done, click on Save or Cancel. To delete the page entirely, click on Remove Page or the trash can icon. The page goes to a trash can, from where it can be restored by the administrator. The administrator determines which groups have permission to edit pages in the wiki space and can also restrict editing permission for individual pages.

- How to export pages

Each page has a clickable PDF icon in the upper right. The other way to export a page is to first click on the Info tab on the top left of the page, and then to select Export As: PDF or Word.

- How to track changes
DukeWiki supports version control to track changes to wiki pages. The Dashboard displays recent updates to DukeWiki spaces. When users set up their personal preferences they can opt to receive email notices of changes. The most comprehensive way to track change is on the page itself. Underneath the tab bar near the top of the page changes is listed who last edited the page and when. Click on view change to open a page comparison. In this space the user can view changes in the most recent version of the page, view older versions of the page, compare versions, and restore older versions if desired. Within this view, click on view page history to display a list of all versions.

- How to access help pages
  The easiest way to get to DukeWiki Help is to click on the link in the Dashboard. Find the link in the paragraph under the heading “Where do I start?” DukeWiki help provides basic instructions for users and administrators, as well as frequently asked questions and a few special topics. For questions regarding wiki markup, refer to the Notation Guide at the link supplied at the beginning of this section.

How the Technical Communication Wiki was used to manage this project

When we began work on our Capstone Project, we knew that we would have to be organized. Because we had "worked ourselves out of a job" on the project for the Information Architecture segment of the course, we had to start a new project from scratch for the last 6 weeks. Without a pre-existing content plan or body of research, there was no leeway for lost time or confusion.

The Information Architecture project had pointed out some of our organizational shortcomings. Constraints of time and distance limited opportunities for in-person meetings, so most communication was through email. Confusion arose because our team had not established a standard nomenclature for files and subsequent revisions. It became difficult to keep up with the volume of emails, especially as the deadline approached and there was a flurry of emails going back and forth, many with attachments.

When we decided to research wikis for the Capstone Project, it seemed logical to find a suitable wiki space to manage the project. After some searching by all members, Penny discovered DukeWiki. Her status as a Duke employee entitled her to request a wiki space for a project related to a class at Duke Continuing Studies. Neither Elaine nor Kristie had current Duke NetIDs, but Penny was able to sponsor them through the Office of Information Technology. Acting as wiki space administrator, Penny set Kristie and Elaine up in the group "tcw-technical communication class members," with broad permissions. Outsider access to the wiki was added, with permission only to view pages and comment.

We began to add pages to the wiki site. We started with the title page and added children. Wiki format supported construction of a table of contents with links to pages within the wiki space. Among these were the three chapters taken as individual assignments by team members: Chapter 1: Wikis Overview (Elaine); Chapter 2: Public Wikis (Kristie); and Chapter 3: Corporate Wikis (Penny). The remaining topic, Chapter 4: Personal Wikis, was started and left as a stub due to time constraints.

Initially, most content was composed in Word and imported to the wiki space. Later work was done in the wiki space itself. Once the team was underway, we composed and revised common pages freely, adding pages and editing content as appropriate. It was understood that chapters must be composed by the individuals taking responsibility for content, but comments and editing were expected. After a while, the team decided to make the wiki a deliverable.

At those times that all team members were at work in the wiki space, it became like a text editor with instant messaging. Team members could view and track changes and give instant feedback and suggestions, without the need for email. Page histories could be viewed at any time. Also, the ability to export pages as a PDF file provided a quick and easy check of the appearance of the final document.

All of this streamlined the composition and revision processes tremendously. There was a moderate investment of time in learning how the wiki worked, and there were some frustrations at the limitations of the text editor and its ability to export as expected. However, it was well worth it for the organizational capacity, ease of collaboration and communication we were able to achieve. Overall, the team found that project management through the wiki was a vast improvement over email. Furthermore, with the wiki, the project structure and project history were always right there for easy reference. The DukeWiki enabled our team to meet the challenge of developing and delivering our project on time.

A Modest Proposal for the Technical Communication curriculum

I would like to suggest a change in course management. While the course has been well organized and well taught, distribution of class material and communication with students could benefit by the utilization of these emerging applications.

This year most segments of the class followed a similar pattern. The class met on Wednesday evenings for lectures and discussion. Sometimes there were in-class exercises. Outside of class almost all communication was done through email. Most instructors preferred to send course
materials as email attachments a few days ahead of class. Messages to the class in general were sent as group emails. Consequently, each instructor maintained an address list, and each student maintained some sort of archive.

As time passed and the course progressed this process became somewhat unwieldy. With each segment there were more instructors' materials and more messages to track and archive. It became challenging to keep it all organized and readily accessible for reference.

Our experience with DukeWiki convinced us that a well-designed wiki is a powerful and efficient tool for managing information and tracking processes. It is ideally suited for organizing a multifaceted curriculum.

I propose that the Graduate Certificate Program in Technical Communication should get its own DukeWiki space. A central wiki space could serve as a “one-stop shop” for the entire course. Instructors could have their own pages, to compose as they see fit. They could import or attach documents according to the organization of the class segments, with plenty of room for commentary. DukeWiki also supports links to references. Messages to the class in general could be posted as news. It would still be necessary to email individuals or teams, but the volume would be far less.

There is one small technical difficulty to overcome. Because Continuing Studies students are not granted all the privileges of regular graduate students, many class members will not have Duke NetIDs. However, they may be sponsored for NetIDs, and our experience indicates that the process is quick and easy.

It is my hope that the curriculum organizers will take my proposal seriously. I believe that it will enhance the class experience by improving class organization, while at the same time teaching the students about an important application for information management.

List of Links
The following websites were linked to this chapter:
http://www.atlassian.com
https://wiki.duke.edu/display/dwh/Home
https://wiki.duke.edu/Renderer/notationhelp.action?section=all
http://www.idtdna.com/home/home.aspx
http://www.idtdna.com/LabLinker/
https://wiki.duke.edu/Renderer/notationhelp.action?section=all
http://www.oit.duke.edu/web-multimedia/web/wiki/