# **Results of the Corporate Wiki User Survey**<sup>1</sup>

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*For the follow-on survey please go to:* https://emarshall2.usc.edu/ultimatesurvey/takeSurvey.asp?surveyID=561

#### **Project Summary**

From October to November, 2005, we posted an online survey for corporate wiki users. The purpose of the survey was to understand factors that are related to how corporate wiki users contribute to their wikis. To complete this survey, we posted an announcement about the survey to a variety of websites and listservers in which corporate wiki users were known to troll<sup>2</sup>. We also used a wonderfully supportive set of personal contacts who are acknowledged in the footnote. Finally, we offered a raffle in exchange for completing the survey. We randomly selected a respondent from the first 80 to receive the prize, and then randomly selected a respondent from the second set of 80 respondents to receive the 2<sup>nd</sup> prize. Both prizes were iPod Nano. Congratulations to the winners!

We received responses from 161 corporate wiki users. Respondents were generally quite experienced wiki users, with the average respondent contributing to wikis for over 2 years, and regularly reading on average 3 wikis.

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<sup>2</sup> These included meatball.com, wikisym.org, twiki.org, mediawiki (mail.wikipedia.org/pipemail/ mediawiki-I), a variety of Yahoo Groups including bayxp, domaindrivendesign, industrialxp, junit, siliconvalleypattersn, and testdrivendevelopment, <u>J2EEPATTERNS-INTEREST@JAVA.SUN.COM</u>, <u>patterns-discussion@cs.uiuc.edu</u>, Twiki Codev community, Twiki Support community, www. Alacrawiki.com, Colabria blog (<u>http://kmblogs.com/public/blog/107934</u>), KM Cluster (<u>www.kmcluster.com</u>), SIM (<u>www.simnet.org</u>), the Marshall alumni page, and many interested bloggers who took it upon themselves to spread the word.

#### **Survey Results**

We asked each respondent to focus on one particular corporate wiki when answering the questions. There was quite a range of work activities that the wikis were used for: software development, requirements specification, tutorials and e-learning, information sharing among customer support groups, sales and marketing (by keeping daily logs on leads), project management, firm policies, solutions to operational problems, client progress, updates on production issues, best practices, and knowledge management. The wikis had been in existence, on the average, for about 19 months, with a range from 3 months to 3 years. The number of people contributing to the wikis ranged as well, from 2-700, with an average of 38; the number of lurkers ranged from 0 to 7500 (with an average of 132). Thus, we were fortunate in our survey sample to get a wide range of corporate wiki users, using wikis ranging in size, purpose, and activity.

We asked respondents how often they contributed to the wiki, with the average being "about once or more a week". Factors that were statistically correlated to the amount of contribution the respondent made to the wiki included: a) number of times wiki accessed, b) whether wiki was used on novel and interdependent tasks, c) amount of task expertise that respondents thought they had about the task that the wiki was being used for, d) the degree of knowledge specialization among the community of people using the wiki, e) perceived credibility of that community, f) familiarity with other members of that community, g) the degree to which any benefits at the individual, work and organizational level were being achieved by using the wiki, and h) the size of the organization (people in larger organizations were less likely to contribute frequently). Interestingly enough, the amount of experience that respondents had with wikis didn't relate to amount of contribution they made; additional, amount of contribution was not affected by the number of wikis that one contributed to.

We computed a ratio of 1) the number of contributors to the wiki over 2) number of contributors plus number of lurkers. The average is .40, which means that for every 2 participants, there are about 5 lurkers. This ratio is much smaller than the 1:100 expected of public wikis. The ratio wasn't correlated with frequency of contribution, or any other variable.

We asked respondents to describe the various types of contributions they made to their corporate wiki. Listed in order of frequency they were (see table on the following page):

Type of Contribution to the Wiki	Average Across Respondents [Almost never (1), Seldom (2), Sometimes (3) Occasionally (4), Often (5), Frequently (6) and All the Time (7)]
Adding Content to Existing pages	5.41
Creating New Pages	5.02
Making Comments on Existing Pages	3.88
Making Small Corrections in Factual Inaccuracies	3.78
<i>Integrate Ideas</i> That Have Been Posted onto Existing Pages	3.47
Reorganize A Set of Pages	2.82
Edit Others' Grammar or Spelling	2.73
Rewrite Whole Paragraphs	2.29
Roll-Back Others' Writing	1.74

From the table, it's clear that the respondents are "often" adding content to existing pages and adding new pages, "sometimes" integrating ideas from existing pages, and "rarely" rolling back others' writing.

Of the 161 users, 51 used twikis, 33 used Mediawiki, 54 used "other" which included JSPWiki, kwiki, Socialtext, Jot, Confluence, pmwiki, dokuwiki, xwiki, flexwiki, and homegrown. Finally 24 reported not knowing the type of software they were using. Use of software didn't seem to affect the kind of contributions people made, although twiki users were more likely to have contributed to wikis for a longer period of time than people using other software, and had a larger number of pages accessed, and, as a result, had a larger number of people contributing to their wikis.

We asked respondents how often they met their fellow wiki contributors face-toface. We compared those with face-to-face encounters and those without and found that those with face-to-face encounters contributed more new pages, new information, corrections, minor edits and restructuring, but not more integration of existing ideas than those without face-to-face encounters. Moreover, those with face-to-face – not surprisingly – reported more familiarity with other users of the wiki. Those with face-toface encounters reported more communication with a variety of people in other projects and reported receiving greater value from the wiki for their work. So clearly, face-to-face seems to help. However, note that those with face-to-face didn't contribute more frequently, didn't have wikis with more participants, more accesses, or more lurkers, nor did they report more benefits for their organization or their personal reputation, suggesting that face-to-face isn't essential for achieving benefits from wikis.

Some of the respondents reported coming from larger-sized organizations; some came from smaller-sized organizations, so we compared the two. Aside from larger organizations using wikis longer, and people in smaller organizations contributing more frequently, we found few differences (e.g., in value, type of contribution, tasks for which wiki used, number of accesses or participants, etc.). Moreover, the age of the wiki made

little difference except in one important way: wikis that had been around longer had a larger number of contributions, more lurkers, and more accesses.

Some of the respondents had been using wikis for a relatively short period of time (4-6 months), while others had been using wikis for 3 years or more; so we compared the two groups. We found surprisingly few differences: whether you are a novice or not, you contribute about the same, and in the same ways. Moreover, whether you are a novice or not, you and your organization receive the same value; however, "longer-termers" report finding the wiki of more direct relevance to their work.

Some of the respondents were what we might call "bridgers" (that is, they communicate with people in *other* projects on a regular basis). Bridgers were more likely to report that the wiki contributed organizational and work-related value, found the work performed on the wiki to be more novel and require more interdependence, found their co-workers using the wiki to be more credible, and tended to add more pages and information on a regular basis than their non-bridging colleagues. However, bridgers were *not* more likely to make integrative contributions than non-bridgers.

We looked at a couple of success metrics. First we looked at a subjective metric by asking respondents how well the work using the wiki is done in a well-coordinated fashion with few misunderstandings. We found this measure of well-coordinated wiki use to be related to such positive measures as increased contribution and increased benefits at all three levels (individual, work, and organization). Predictors of bettercoordinated wikis included: respondents believing that they depended on the wiki more to perform their work, and those contributing to the wiki having higher credibility.

The second metric we looked at was the number of accesses the wiki received. We found predictors of number of accesses included: wikis that had been around longer, wikis that were depended on for communication, and, not surprisingly, wikis that had a larger number of contributors. Benefits to the organization were also reported to be higher for these wikis with a larger number of accesses.

We compared wikis that were integrated into the corporate portals from those that weren't and found no differences in any of the variables except number of accesses: tying the wiki to the corporate portal increases the number of accesses, but doesn't affect the type of contribution or the perceived benefit achieved from it.

We looked at wikis that had a group of core members with special access rights or responsibilities, and compared them to wikis without a core group. There were 115 in our sample (81%) with core groups. We found that respondents indicating that their wiki had a core group contributed more frequently, but didn't contribute in a different way. The credibility of the people contributing to the wiki was higher, but the benefits to the organization were the same. We then looked at the effect of being a member of this core group on the type of contributions respondents made and found a huge effect. That is, core members were more likely to make all kinds of contributions including rollbacks

and integrative. They also reported more personal benefits and benefits to their work, although not to the organization.

We looked at wikis that were used primarily to generate documents (there were 40 in our sample) and found that these wikis were more likely to generate a range of contributions from minor edits to integration, were more likely to be depended upon as the primary communication tool, and were more likely to engender feelings of greater personal reputation from using it. What's interesting here is that these wikis had a smaller number of contributors than other wikis, suggesting that feelings of personal reputation don't necessarily come from the size of the wiki, as much as how it is used.

Finally, in addition to our primary research question of exploring the differences between the three groups, we asked survey respondents to share with us any lessons learned about successful corporate wikis. We were impressed at the extensiveness of contribution from the respondents. Over 110 respondents shared 220 lessons learned from their experiences using corporate wikis. Responses varied from tips and suggestions, to in-depth discourses on the 'slings and arrows' of wiki use. A content analysis of the responses revealed that the lessons fell into five broad categories: 1) Structure of Wikis, 2) User-Focused Participation, 3) Managing Content, 4) How Wikis are Used, and 5) Change Management. The appendix shows the categories with a large selection of the user comments.

For each of the categories, general principles can be identified. These are:

• Keep the wiki simple but how much structure to impose is still unclear Experiences varied widely. One the side that recommended that structure evolve were such comments as: "let the wiki user base establish its own patterns of usage, and the specific uses to which they would like to put the wiki, with little or no restrictions;" and "don't impose a structure but let it smoothly evolve." On the other side were those that felt structure was "crucial," "important to avoid info overload," and "key" for making wikis useful. More analysis is needed to determine what factors account for the dichotomy of opinions here, perhaps factors like wiki size, purpose, or user community. A similar debate emerged over access controls. Some felt that access control made users "more comfortable contributing and editing," while others argued that "open edit access" for all reflected trust in the users. Clearly, making things "simple" means a very handsoff policy for some, rigorous standardization policies and usage norms for others.

• Increase reliance on wikis as a primary communication media.

Participation was encouraged by having wikis as a primary communication media, placing information at the users' fingertips. One strategy to make wikis more personally useful was to "place necessary information there to drive them to regular reading" so that "employees can't live without it." Successful wiki implementations resulted in less use of "the traditional communication forms (i.e. email)" but required frequent and consistent repetition of the mantra "it's on the wiki" when someone has a question or was looking for information. Users who don't realize personal benefit are loathe to adopt wikis and instead view wikis as "extra work."

• Put procedures in place to keep content alive

Without a "procedure for keeping most content reasonably up to date", content "often dies or at least becomes stagnant." This can be a problem for users who aren't sure "if it's just outdated or if there is no new information". Information that becomes "redundant" or "stale" "will not go away by itself" and requires the services of a "gardener." While some advocated that "everybody needs to feel responsible for keeping it alive and up to date," others pointed to the necessity of having a champion for each wiki page to regularly "add useful content."

• Integrate wiki use into corporate structure

Respondents commented that successful wikis were those that were integrated into the overall complete corporate knowledge management portfolio and into users' projects. Respondents advised that the wikis should be "integrated into your processes," and made into an "integrated program resource" rather than simply a "support tool." Integrating wikis with other infrastructure and deciding what information goes where can be a challenge, however. Respondents reported having a "hard time figuring out how the Wiki works with the rest of our documentation and policies" and how to manage information overlap with LANs, intranets, and databases. They further cautioned that "wikis should not be primarily used for 'everything'" (such as communication); they complement rather than replace other collaborative tools that the corporation uses. Finally, when choosing a particular wiki, it seems "the right wiki matters." While many noted that Twiki was most popular software used "behind the corporate firewall," others employed different open wikis and some preferred hosted wikis for the added support. Given the wide range of wiki software used, it is evident that what works best in one situation might not be ideal in other circumstances, and the search for the perfect match can be difficult.

Major change management challenge is convincing users to share and edit • There were many comments about the challenges of convincing corporate users to openly share, and edit, their knowledge and the knowledge of their coworkers. Many noted that "employees don't naturally want to share or document information," especially "non-technical employees." One respondent observed that "the 'edit' button might as well be poison!" Others felt that wiki users had difficulty coming to terms with "public" authorship and others editing their contributions ("contributing on top of / gardening their stuff"). Some felt users didn't contribute because they didn't see their individual contribution as "worth a lot" or that using the wiki was simply "extra work." This last challenge drives home the importance of adopting and diffusing the wiki philosophy ("the wiki way") and not just the wiki technology such as touting the benefits of "linking ideas" and the "open edit" capability, and most importantly "reward collaboration" on wikis. Help users by providing training, by winning "management sponsorship & commitment," and by "gently" but repeatedly "nudging" people into using the wiki. "It's on the wiki..." "please put this on the wiki..." "...you get the answer: 'it's on the wiki'."

#### Conclusion

It's still early in our analysis to make final conclusions, but so far, our results can be summarized in the following:

• Wikis are a leveling experience. Whether your wiki is in a large or small organization, whether you meet face-to-face or not, whether you know the

other parties personally or not, whether you are a wiki novice or not, which wiki software you use, whether you are a task expert or not, whether your wiki has been around a long time or just started, whether the wiki is tied to a corporate portal or not – none of these factors affect the type of contribution a user makes.

- Ways to encourage more contributions to the wiki included:
  - clarify the task specializations within the group of people contributing,
  - ensure that the task the wiki is intended to perform is a novel and interdependent one,
  - use wikis to generate documents or shared output
  - increase dependence on the wiki as the primary source of communication (vs email or discussion boards) by integrating the wiki into the work process and reinforcing wiki use,
  - continue the practice of core groups and
  - increase the number of people who feel they are in this core group
- Open issues continue to be: how much structure, how much access, how to encourage people to edit others' work.

## **Next Steps**

We plan on doing significantly more analysis. In particular, we're interested in exploring the factors that relate to the different types of contributions people make (e.g., integrative vs just minor editing, vs just adding new pages). We're also planning on doing more analysis on factors affecting success of the wikis. This analysis and your comments to the survey helped us to realize that there were a few additional questions we would like very much to have answered for us to be able to do this analysis and report the results back to you. We have created a short 5-minute questionnaire, if you would be willing to complete it. In exchange for completing this questionnaire, you will then receive the report for the followup analysis. Would you go to <a href="https://emarshall2.usc.edu/ultimatesurvey/takeSurvey.asp?surveyID=561">https://emarshall2.usc.edu/ultimatesurvey/takeSurvey.asp?surveyID=561</a> and complete these few questions?

## Appendix: Open Ended Answers to Question: "Please share any lessons you have learned about successful corporate wikis."

The outline below shows the 5 major and 24 distinct sub-categories we felt embody the 220 user comments. For each sub-category we list selected comments concerning the respondents' experiences using corporate wikis. Rather than list every comment, we chose a selection that provides a concise summary of each issue while still representative of the complete set; for issues that were highly contested, we selected a balanced sample to represent both arguments.

#### I. Structure of Wikis

A. Simplicity

- Twelve users indicated simpler interfaces and structure aided adoption while, conversely, wiki markup language and tools were often too complicated for non-technical users
- "Keeping things simple in the beginning helps a lot"
- "Keep them simple"
- "Make it as simple as possible"
- "The wiki markup has to be easy to learn"
- "Wiki syntax/language is hard to write"
- "Wiki format an impediment to new users"
- "(Wiki) technology still has some way to go"
- "Hard to find simple tools"
- "Must be easy to edit"
- "KISS is a key principle why managers like wikis"

B. Imposing Structure vs. Relying on Emergence

- Eighteen users were adamant that an imposed structure was crucial to wiki development and usefulness; however, 16 users were equally sure that wiki structure must emerge from user needs. Those favoring structure seem more concerned with long-term viability of the wiki; those preferring emergence hope to increase adoption rates and novel idea generation.
- "let the wiki user base establish its own patterns of usage, and the specific uses to which they would like to put the wiki, with little or no restrictions"
- "a wiki is useful in more ways than is currently mentioned in the docs"
- "Let the users steer it where it wants to go"
- "people think of wikis as something for which best practices emerge"
- "to not impose using the wiki to anybody"
- "Don't impose a structure but let it smoothly evolve"
- "Organization is key"
- "Rules for contribution and data organization are important to avoid info overload"
- "You need a basic structure before people should contribute"
- "We've made an superb structure into our Wiki"
- "An organization scheme is crucial"
- "organized in a logical flow, in order to survive"
- C. Champion Roles Wiki Evangelists

- Often wiki's need a champion to help them take off, to help them grow, and to provide legitimacy and resources. Users commented on these three roles champions play with respect to wikis
- "It normally takes an Evangelist to kick start acceptance of the tool"
- "core team members will help to start the "kick-off" phase better"
- "A successful Wiki has always a Wiki champion"
- D. Champion Roles Key Contributors
  - "core group of contributors that will get a good deal of information onto the wiki, then it can become useful"
  - "Find a few champions, and get them to add very useful content"
  - "needs to be 1/a few initiators that are creating pages, adding information, showing how simple it is to edit"
- E. Champion Roles Management Buy-In
  - "A corporate wiki needs (executive) management sponsorship & commitment"
  - "if you don't motivate the leadership, the wiki is due to die soon"
  - "One of the challenges we faces was upper management buy in."
- F. Access Control vs. Open Editing
  - Three users commented on the importance of access control, while five lobbied for completely open editing. Curiously, both camps thought their strategy would make users feel more comfortable contributing and editing.
  - "make them password protected so that people trust who made the changes"
  - "Read-only access generally works fine for other parts of the company"
  - "Trust your people; strive for more open \*EDIT\* access"
  - "stay away from heavy use of access control lists"
  - "Open them up to all."

## **II. User-Focused Participation**

A. Narrowing Communications Options

- One valuable trait of wikis was reducing user dependence on other communication forms (such as email) that are less suitable for managing dynamic content
- "Changing people's habits to use wiki's rather than emailing Word documents is almost as hard as fixing world debt!"
- "steers people away from the traditional communication forms (i.e.; email)"
- "anytime you ask somebody a question relating to the project you get the answer "it's on the wiki"."
- "Frequent use of "its on the wiki" when asked questions"
- "It has taken us many months of saying, "It's on the wiki" to get them to look there"
- B. Advertising for New Users
  - Grassroots, viral marketing campaigns work best but some organizations use advertising blitzes to get new users on board with wikis
  - "I have never launched this as a "new technology", rather kept it very low profile and used 'viral' approach"
  - "The key is promoting the wiki. People have to know they exist"

- C. Training New Users
  - Thirteen users felt organized training was a must for new users
  - "Getting people to understand what a wiki is and its capabilities is difficult. Hold training sessions and informational sessions"
  - "set up a trial you know is going to work and let others know how and why"
  - "a short ten to fifteen minute face to face demo and tutorial is a very good idea"
  - "latest trend for us is encouraging folks to populate their default personal user page"
  - "post lots of help information"
- D. Personal benefit to the user
  - "wikis frighten people until they see the benefits for themselves"
  - "wait till they saw the benefit of moving the core of their collaboration to this platform"
  - "People must find the info valuable to themselves"
  - "A corporate wiki will only be used when employees can't live without it"
  - "Place necessary information there to drive them to regular reading"
- E. User Identification with the Wiki
  - "Some people really love the idea (of wikis), others feel apathy towards it"
  - "There are often only a few key contributors, and many lurkers who come and go"
  - "wikis are only as useful and successful as the users want them to be"
  - "Everybody needs to feel responsible for keeping it alive and up to date"

#### III. Managing Content

- A. Minimizing Redundant Information
  - Open editing can result in duplicated information from other sources, and at times duplicate information within a number of wiki pages
  - "we have had significant problems with information existing in several places (e.g. the wiki, the file system, in email) and not being consistent"
  - "it's (the wiki) yet another place to try and find information"
  - "there is much duplicated information"
  - "one difficulty we've had is when pages aren't kept up-to-date, but you aren't sure if it's just outdated or if there is no new information"
- B. Keeping Information Alive
  - Ensuring wikis contain up-to-date information was the most cited lesson learned, with comments from 21 users. Without regular effort content "often dies or at least becomes stagnant"
  - "Getting rid of stale info is a problem. It does not go away by itself."
  - "Have a "gardener""
  - "Content will become stale over time, needs procedure for keeping most content reasonably up to date"
  - "Wiki must be nurtured steadily and progressively all the time"
  - "The information must live"
- C. Search Tools to Locate Information

- "most successful wikis are the ones where finding information is not burdensome and the process of finding it is accurate"
- "finding what's in there can be a real pain, even impossible at times"
- "Searching for info is poor. We can't easily do the kinds of complex searches we need to do despite an apparently capable search engine"
- "no Search available while editing"

### IV. How Wikis are Used

A. Collective Knowledge Building

- Wikis are only useful if many people use them
- "It takes critical mass the wiki is useless unless lots of different people help build it"
- "cooperation, teamwork ability,..."
- "The wiki-way is superior, because of ease of linking ideas, and 'open' editable philosophy"
- "reward collaboration on pages"
- "Wiki's are great tools for collaboration on documents and capturing content"
- "We have a large team spread out over several countries working on a large development project. So having one place to collaborate everything at any time was incredibly helpful"
- B. Integrating Multi-User Project Information
  - "shared content editing is still difficult to do in practice"
  - "the person taking the notes types what someone else says and the person who said it doesn't agree with the interpretation of what they said, so they go into the wiki and change it."
  - "long-term value comes from the multi-contributor project information"
- C. The Right Wiki for the situation
  - A handful of users noted that not all wikis are created equal support tools and hosted wikis appeal to some corporate users
  - "We are using a hosted Socialtext, which in my view is the superior corporate wiki"
  - "The right wiki matters. There so damned many of them that it is often hard to find a decent one."
  - "Make sure your wiki application is well supported (e.g. twiki.org)"
  - "TWiki seems to be the most popular Wiki behind corporate firewall, MediaWiki is getting used most on public sites"
- D. Opening Up Corporate Wikis to Customers
  - Perhaps wikis will in the future liberate knowledge sharing up and down the value chain
  - "We have opened up our wiki to selected customers, keeping all our records and documentation open to them as well"
- E. Integration of Wiki into Corporate Projects
  - Gradually wikis are moving from support tool to integrated program resource
  - "Complements and is linked to and from the more formal corporate directory"
  - "Wikis are terrific for developing performance support documents"
  - "now almost everything relating to R&D is tracked through the Wiki"

- "Integrate them into your processes"
- "Some companies standardize on wikis and have their mission critical data in a wiki"

## V. Change Management

- A. Fitting Wikis into a More General Collaboration Strategy
  - "We're having a hard time figuring out how the Wiki works with the rest of our documentation and policies. We have a LAN to store files, and an Intranet that hosts Policies and Meeting Minutes/Agendas/etc."
  - "don't make it do everything. for structured documentation use a DMS, for web-based information consolidation use a portal, to support collaboration, innovation and achieve project/team flexibility use a wiki"
  - "Wiki's are great tools for collaboration on documents and capturing content. For communication we don't use the wiki (anymore), but a discussion forum and blogs"
  - "difficulties with integration with infrastructure & other tools/repositories"
- B. Changing Culture to Encourage Open Sharing
  - The greatest challenge cited (by 32 users) was changing users' long-held aversion to open sharing and editing.
  - "It is generally difficult to get people to START contributing."
  - "Some employees don't naturally want to share or document information, and so they don't use a wiki, no matter how much encouragement you give them."
  - "new to the corporation and the idea is very foreign; not catching on too well in terms of authorship or readship."
  - "Nudge people into using the wiki instead of just writing an email: "Could you please put this on the wiki...?""
  - "difficult to convince non-technical employees to contribute to the wiki. Instead, these often prefer more visually oriented tools over the simple and powerful, but somewhat arcane wiki markup"
  - "It takes a while (or forever) for people to feel comfortable as public authors"
  - "It's been difficult to get some people comfortable with contributing -- one user has printed everything, made notes on it, then typed it into a word processor, and then gone in and pasted the notes onto pages in the wiki itself."
  - "It is very hard to get people to share and contribute. The 'edit' button might as well be poison!"
  - "Stimulate people to contribute, even if they think their contribution is not 'worth a lot"
  - "Need to gently force people to use it, or they'll avoid it as "extra work"."
- C. Changing Culture to Encourage Open Editing
  - "There has to be a commitment made to not just putting information in the wiki, but keeping it updated."
  - "Hard to get people used to the idea that people can/will change pages that they think "they created/own""
  - "get people to edit simple pages first;"
  - "It's been difficult to get some people comfortable with other people contributing on top of / gardening their stuff"

- D. Fitting the Wiki to the Worker
  - Often change management means realizing some user characteristics will not change, and planning accordingly.
  - "corporate wikis work well as collaborative tools within technology departments"
  - ""techies" who are used to internet tools demand functionality of open source products"
  - ""IT" demands integration potential, security, accountability often at the expense of the collaborative environment"
  - "Business stakeholders have difficulty understanding the difference between wiki, blog and threaded discussion"
  - "engineers and scientists use wikis more often because: more familiar with taxonomy; less intimidated by wiki markup; more open to exploring, experimenting, brainstorming"

E. Problems of Change Management for Wikis

- "I've seen many wiki's be successful temporarily, but few last more than a couple years"
- "Plan on a less that smooth adoption course for new wikis, it's hard to convince some people that a wiki doc, is just as good as a \*.doc"
- "It is hard for people to switch from a email based information flow to wikis"
- "I've tried to use Wiki's a lot and never been successful. The most active Wiki in our department is the one on How to for Home Maintenance"
- "Wiki's are only successful in high tech project applications within our business."