

## Corporate Wikis Results of a Survey

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## Background

- Wikis are “hot” as business technology for knowledge management.
  - Business media (e.g., Business Week)
  - Gartner Group
- Large proportion of CIOs not convinced.
  - Benefits (ROI, value, whose benefits)
  - Feasibility (technology, legal, organizational)
  - Obstacles (will wikis work)

## Quote

*“Wikis will become mainstream collaboration tools in at least 50% of companies by 2009.”*

--- Gartner Group, June 2005

## Larger Research Project

- In-depth cases of corporate use (interviews).
- Interviews with wiki experts / thought leaders.
- Technology survey.
- Consultation of a legal experts on wikis and intellectual property management.
- Survey of 168 corporate users.

## Survey Process and Respondents

## Wiki Survey Process



- Collected data in Fall 2005.
- Sought breadth of companies and wiki uses.
- Advertised on 10 different listservers and asked leading wiki corporate users.

## 168 Respondents

|   | Mean         | Median             | Range |
|---|--------------|--------------------|-------|
| Months contributing to this wiki        | 15.2         | 11                 | 1-72  |
| No. contributors worked with in past    | 4.8 ("half") | 1 (none) - 7 (all) |       |
| Months contributing to wikis in general | 26           | 24                 | 1-96  |
| No. of different wikis regularly read   | 3.4          | 3.0                | 1-20  |
| No. of corporate wikis contributed to   | 1.5          | 1.0                | 1-10  |

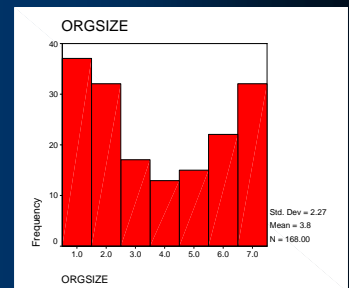
*Conclusion: Fairly experienced but wide variation*

## Technologies Used

| Technology | Responses |
|------------|-----------|
| Twiki      | 51        |
| Mediawiki  | 33        |
| Don't Know | 22        |
| Socialtext | 6         |
| PmWiki     | 6         |
| Confluence | 4         |
| All Others | 46        |

## Organizations Represented

- Range of companies
  - E.g., Novell, Disney, 3M, Toyota, HP, Gartner.
  - >20% with less than 100 employees; about 19% with more than 10,000 employees.
- Mean wiki experience 10-12 months.

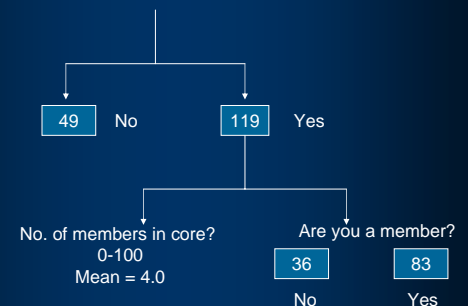


ORGSIZE: 1:1-100, 2:101-500, 3:501-1000, 4:1001-2500, 5:2501-5000, 6:5001-10,000, 7:10,000+

## Variety of Work Activities for Wikis

- Range of task types
  - Software development,
  - E-learning,
  - Knowledge management,
  - Project management,
  - Information sharing,
  - Consulting,
  - CRM,
  - R&D.
- "Almost everything relating to R&D is tracked through the wiki".
- "We have opened up our wiki to selected customers".

## Variation in Whether Respondents Are in a Wiki's "Core Group"



## Research Questions

- Are wikis sustainable?
- Do wikis create different forms of benefits?
- What affects benefits received?
- Are there different types of contributors?
- Are different types of contributors encouraged to contribute by different factors?
- How to overcome barriers to adoption?



Analysis:  
Are Wikis Sustainable?

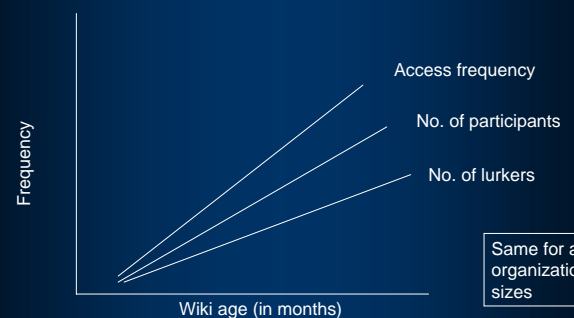
## Are Wikis Sustainable?

|   | Mean               | Median                | Range    |
|---|--------------------|-----------------------|----------|
| ▪ How long in existence? (months)                                     | 10-12              | 12-24                 | 3-36     |
| ▪ How large (readership)?   | 167                | 37                    | 3-7550   |
| ▪ How active (contributors)?  | 37                 | 12                    | 2-700    |
| ▪ How active (frequency of access)?                                   | 5.8 ("frequently") | 1 (never) -7 (always) |          |
| ▪ Ratio of contributors to total number of lurkers plus contributors? | .40*               | .33                   | .01-1.00 |

**Conclusion: YES. Wikis have existed for a while and are active.**

\* 4-out-of-10 contribute, a much higher contributor rate than 1:100 for public wikis, or 1:1000 for Wikipedia.

## Are Wikis Sustainable? (cont'd)



**Conclusion: Frequencies increase with duration of wiki existence**

## Does Access from Portal Affect Sustainability?

|                     | No Access<br>(n=62) | Portal Access<br>(n=105) |
|---------------------|---------------------|--------------------------|
| No. of lurkers      | 48                  | 175                      |
| Frequency of access | often               | frequently               |
| No. of participants | 32                  | 39                       |

**Conclusion: Tying to portal affects access and lurkers, not participants**

Analysis: Do Wikis Create Different Forms of Benefits?

## Perceived Wiki Benefits

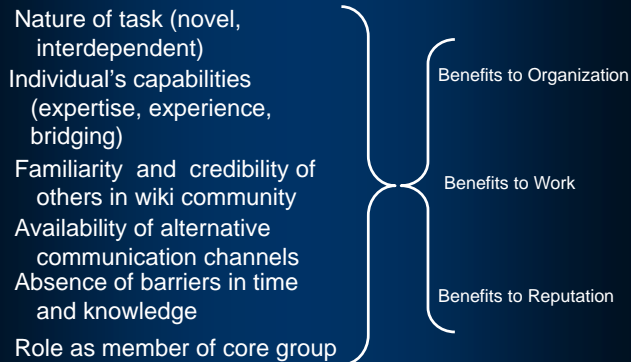
To What Extent (or how often) Has Using this Wiki Yielded the Following Benefits?

|  | % "often" or "significant" |
|--|----------------------------|
| ▪ Helped Organization                                |                            |
| ▪ Improve organization work processes                | 49                         |
| ▪ Increase organization collaboration efficiency     | 63                         |
| ▪ Increase knowledge reuse in organization           | 69                         |
| ▪ Identify new business opportunities                | 11                         |
| ▪ Made Work Easier                                   |                            |
| ▪ Information on wiki relevant to work               | 81                         |
| ▪ Updated wiki information made work easier          | 75                         |
| ▪ information dissemination on wiki made work easier | 71                         |
| ▪ Enhanced Reputation                                |                            |
| ▪ Earn respect of others                             | 29                         |
| ▪ Improve professional status                        | 23                         |
| ▪ Improve reputation in company                      | 28                         |

**Conclusion: Range of benefits from wikis**

## Analysis: What Affects Benefits Received?

### What Affects Benefits Received? (1)



### What Affects Benefits Received? → Organization

Nature of task (*requires new solutions*, interdependent)  
Individual's capabilities (expertise, experience, bridging)  
Familiarity and *credibility* of others in wiki community  
Availability of alternative communication channels  
Absence of barriers in time and knowledge  
Role as member of core group

Benefits to Organization  
 $R^2=.15$

Who reports most organization benefits? Those in novel tasks, who believe others' information is credible.

### What Affects Benefits Received? → Work

Nature of task (*requires new solutions*, interdependent)  
Individual's capabilities (expertise, *experience*, bridging)  
Familiarity and *credibility* of others in wiki community  
*Availability of alternative communication channels*  
Absence of barriers in time and knowledge  
*Role as member of core group*

Benefits to Work  
 $R^2=.33$

Who report most work benefits? Those in novel, interdependent tasks, with more expertise, who believe others' information is credible, who use other channels to communicate, and are members of core group.

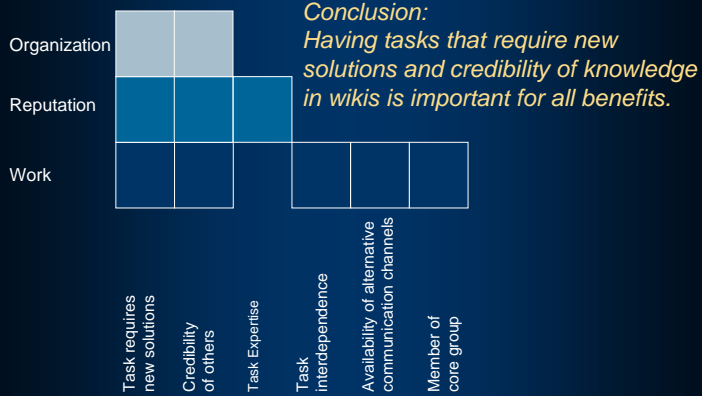
### What Affects Benefits Received? → Reputation

Nature of task (*requires new solutions*, interdependent)  
Individual's capabilities (*expertise*, experience, bridging)  
Familiarity and *credibility* of others in wiki community  
Availability of alternative communication channels  
Absence of barriers in time and knowledge  
Role as member of core group

Benefits to Reputation  
 $R^2=.21$

Who report most reputation benefits? Those in novel tasks, with more expertise, who believe others' information is credible.

## What Affects Benefits Received? Comparison



## Analysis: Are There Different Types of Contributors?



## Variety of Types of Contributions

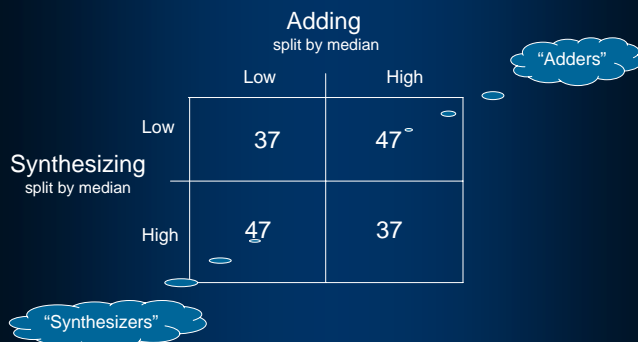
How often have your contributions to the wiki been Mean (1=never; 7=all the time)

|   |      |
|---|------|
| Adding content to existing pages                            | 5.41 |
| Adding new pages  | 5.02 |
| Making comments on existing pages                           | 3.88 |
| Making small corrections in factual inaccuracies            | 3.78 |
| Integrating ideas that have been posted onto existing pages | 3.47 |
| Reorganizing a set of pages                                 | 2.82 |
| Editing others' grammar or spelling                         | 2.73 |
| Rewriting whole paragraphs                                  | 2.29 |
| Rolling-back others' writing                                | 1.74 |

## Respondent Grouping Based on Contribution Type (1)

| How often have your contributions to the wiki been          | Factor       | Variances | and Loadings |
|---|--------------|-----------|--------------|
|   | 30%          | 24%       | 22%          |
| Adding content to existing pages                            | .10          | .83       | .33          |
| Adding new pages  | .24          | .88       | .02          |
| Making comments on existing pages                           | .15          | .13       | .88          |
| Making small corrections of factual inaccuracies            | .40          | .18       | .72          |
| Integrating ideas that have been posted onto existing pages | .82          | .01       | .29          |
| Reorganizing a set of pages                                 | .79          | .37       | .09          |
| Rewriting whole paragraphs                                  | .76          | .17       | .20          |
| Editing others' grammar or spelling                         |              | n.a.      |              |
| Rolling-back others' writing                                |              | n.a.      |              |
|   | Synthesizing | Adding    | Commenting   |

## Respondent Grouping Based on Contribution Type (2)



## Analysis: Different Motivational Factors for Different Contributors?

## What Affects Contribution Frequency for Each Type? (1)

Nature of task (require new solutions, interdependence)  
Individual capabilities (expertise, experience, bridging)  
Familiarity and credibility of others in wiki community  
Availability of alternative communication channels  
Absence of barriers in time and knowledge  
Role as member of core group  
Types of benefits received  
Frequency of site being accessed

Frequency of contribution  
(Synthesizers and Adders)

## What Affects Contribution Frequency for Each Type? (2)

Synthesizers

$R^2=.53$

"Want Impact"

- Worth to organization
- Task require new solutions
- Helps my reputation
- Site accessed frequently

Adders

$R^2=.40$

"Utilitarians"

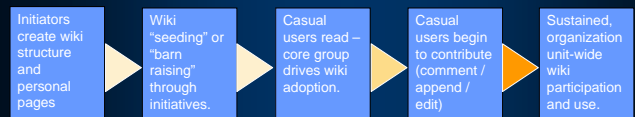
- Worth to organization
- Having time
- Helps my work
- Being member of core group

**Conclusion: Different motivators for different groups: impact vs. utility.**

## Analysis: How to Overcome Barriers to Adoption?



## Wiki Adoption Process



## Overcoming Hurdles (Based on Respondent Comments)

- Getting People to the Wiki
  - Mantra: "it's on the wiki"; "please do this on the wiki".
  - "Advertise for new users through viral marketing".
- Maintaining the Wiki
  - "Keep wikis simple".
  - "Have a "procedure (or "gardener") for keeping content up to date".
- How to Use Wiki
  - Not "support tool" but "integrated program resource".
  - "Good search tools is key".
  - Diffuse wiki way, not just technology: linking ideas, open/public edit, reward collaboration, nudge for "small" contributions. Start with editing simple pages first.
  - Don't make wiki do everything; still need DMS, portal, blogs, discussion forums.
- Strong differences of opinion in amount of structure to impose as a way of overcoming hurdle.

## Summary of Analysis Findings

## Questions Asked and Answered

- Are wikis sustainable? **Yes. They are persistent, sizeable, active.**
- Do wikis create different forms of benefits? **Yes. They make work easier, enhance reputation, and help organization.**
- What affects benefits received? **Expertise, credibility in knowledge, and work requires new solutions.**
- Are there different types of contributors? **Yes. Adders and Synthesizers.**
- Are different types of contributors encouraged to contribute by different factors? **Yes. Encourage synthesizers with focus on impact; encourage Adders with focus on how it helps their work.**
- How to overcome barriers to adoption? → **Manage hurdles.**

## Management Implications to Enhance Wikis Success

- Use wikis on tasks that require new solutions.
- Encourage “Adders” by monitoring wiki use to ensure that work is easier with wiki.
- Encourage “Synthesizers” by focusing on impacts they can have.
- Don’t worry about other forms of communication.
- Monitor wiki to ensure that contributors are credible.
- Overcome hurdles leads to sustainable wikis.

## Conclusions

*Corporate wikis are sustainable.*

*Corporate wiki use relies on similar (but not same) behaviors and incentives as “open” wiki use.*

*Synthesizer behavior is scarce.*

**End of Presentation**