# WIKI ACCOUNTABILITY

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(Use arrow keys to navigate)

# WIKIPEDIA SCALE: HIGH END

- Operating systems: Ubuntu, Windows, OS X
  - 100s of watchers
  - 1000s of edits
  - 1000s of editors
- Popular websites: Google, Facebook
  - 1000s of watchers
  - 1000s of edits
  - 1000s of editors
- Presidents: Barack Obama, George W. Bush
  - 1000s of watchers
  - 10000s of edits
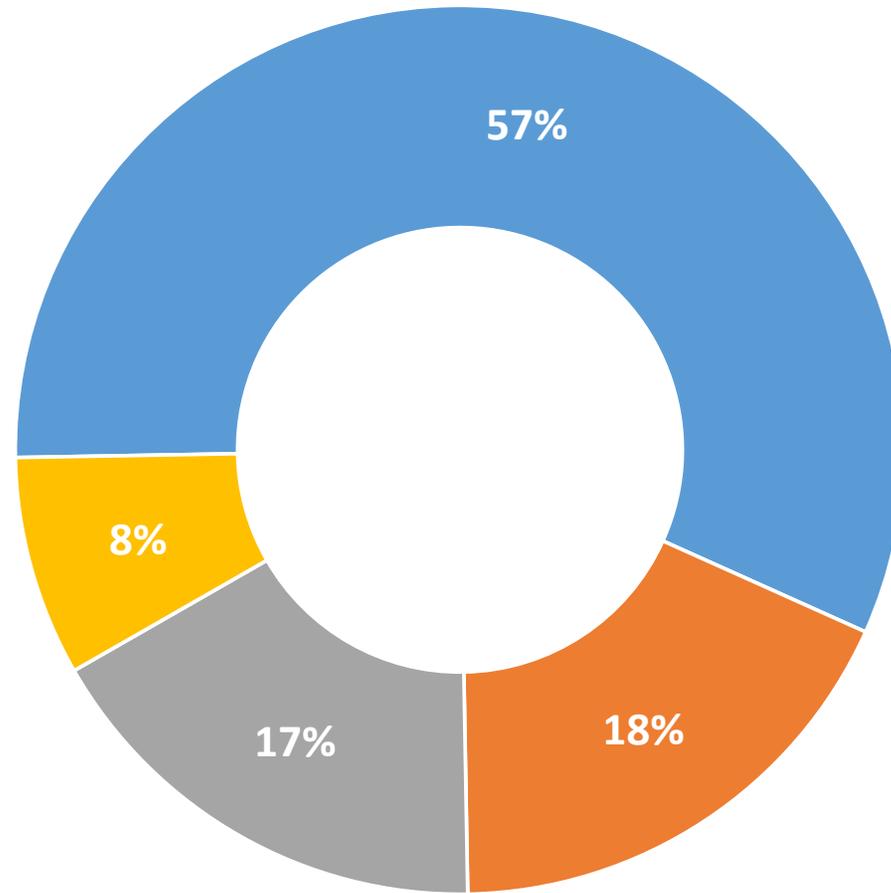  - 1000s of editors

# WIKIPEDIA SCALE: LOW END

- [[Lima Bean]]
  - Fewer than 30 watchers
  - 784 edits
  - 487 editors
- [[Augustan literature]]
  - 40 watchers
  - 487 edits
  - 190 editors
- [[Geography of Botswana]]
  - Fewer than 30 watchers
  - 156 edits
  - 54 editors
  - 14 years old

# OUR WIKI'S SCALE

1. 47 active contributors
2. 67272 edits
3. 400k views in 3.5 years

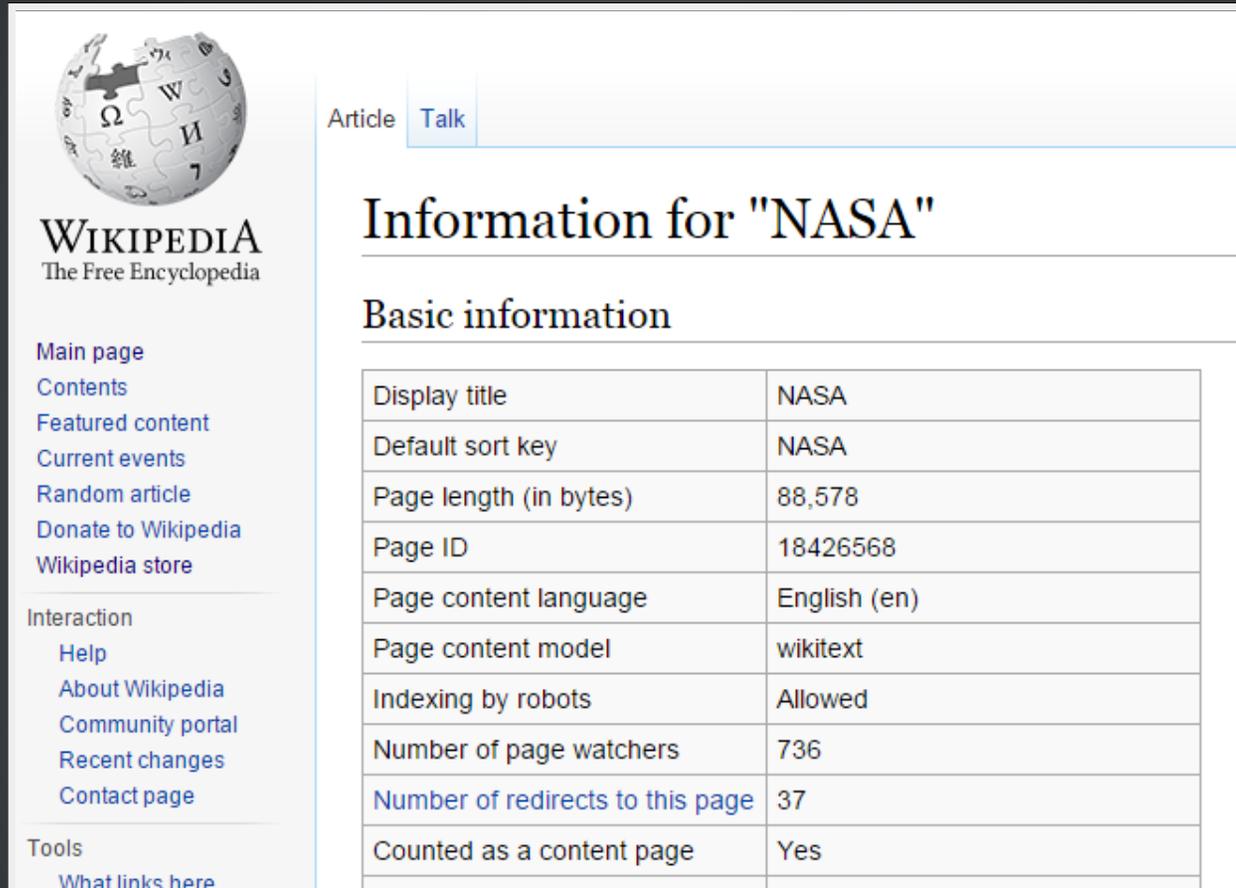# WATCHER DISTRIBUTION: DECEMBER 2014



57%

18%

17%

8%

■ 1 watcher   ■ 2 watchers   ■ 3-5 watchers   ■ 6+ watchers

# QUANTIFYING ACCOUNTABILITY

1. Determine number of reviewers for each page
2. Determine a way to rate contributors
3. Combine (1) and (2) to identify weak points in our data
4. Address weak points

# WHAT MEDIAWIKI ALREADY DOES

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# EXTENSION:WATCH ANALYTICS

## Watch Analytics: Pages

**The state of the Wiki:** 18863 watches of which 3.7% (700) are pending

**View:**

- **Page watch statistics**
- User watch statistics
- Wiki historical watch statistics
- Visualization of all watches

Filter

Filter by user group:

Filter by page category:

First page    Previous page    Next page

| page | # watches | ▲# reviewed watches | % pending | Max pending time | Average pending time |
|------|-----------|---------------------|-----------|------------------|----------------------|
| SharePoint (Watch) | 1 | 0 | 100 | 10 days | 10 days |
| Confluence (Watch) | 2 | 1 | 50 | 14 days | 14 days |
| Google Reader (Watch) | 2 | 1 | 50 | 14 days | 14 days |
| Lotus Notes (Watch) | 3 | 1 | 67 | 50 days | 31 days |

WATCHER ⇔ PAGE RELATIONSHIPS
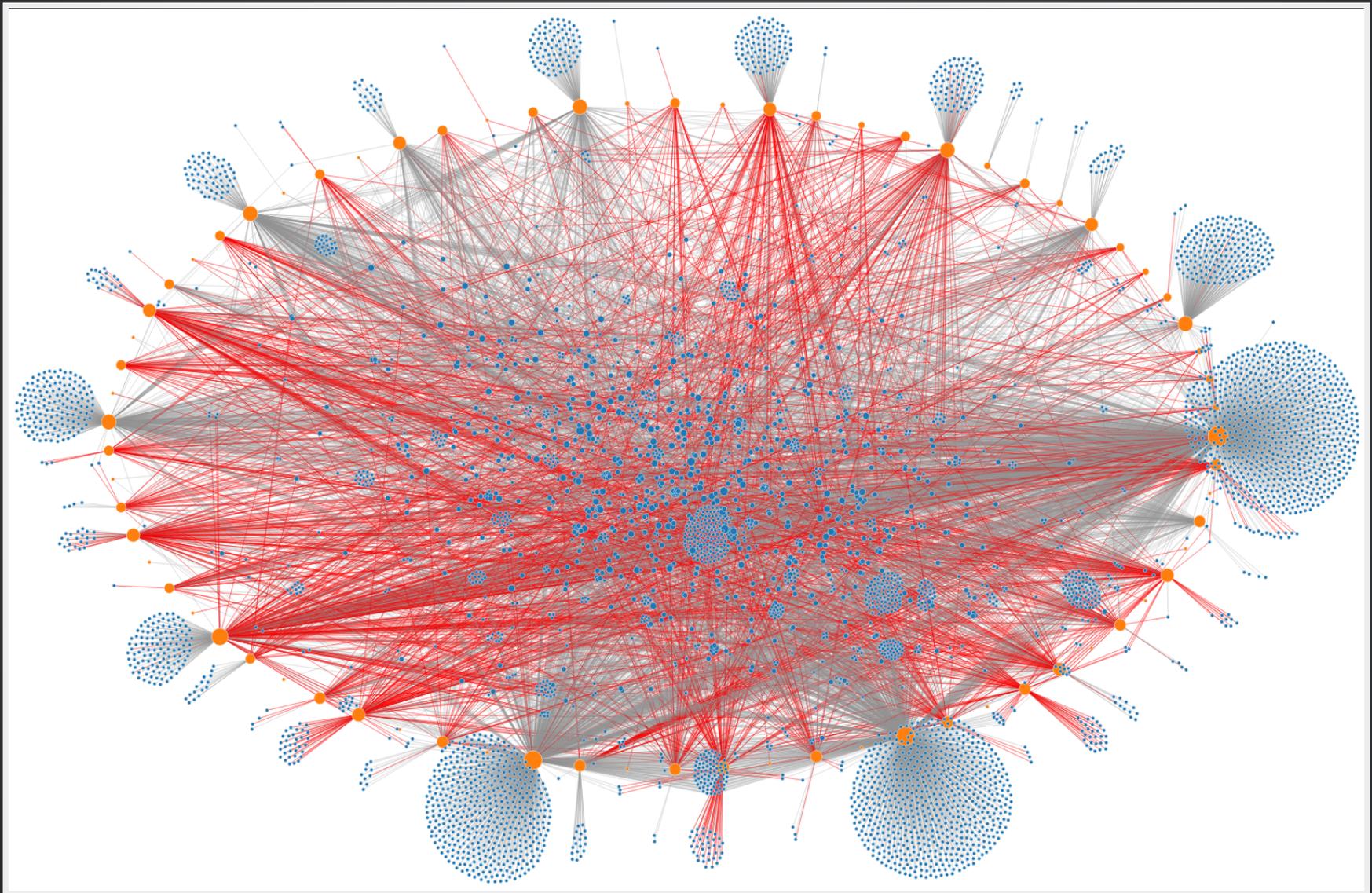
# ACCOUNTABILITY EMERGENCY
## SHORT TERM GOALS

1. Encourage users to do their reviews
2. Eliminate singly-watched pages

# NONDESCRIPT WATCHLIST LINK

# CONFUSING WATCHLIST

# CONFUSING WATCHLIST, PART 2



Browse categories
Community portal
Recent changes
Current issues
Sandbox

Tools
🟠 Atom
Upload file
Special pages
Printable version
Project Status

In other languages

**23 April 2015**

- (diff | hist) . . m VisualEditor; 13:56 . . (-14) . . Syum90 (talk | contribs) *(Reverted edits by 109.237.244.202 (talk) to last revision by Neil P. Quinn-WMF)*

**22 April 2015**

- (Page translation log); 23:38 . . Shirayuki (talk | contribs) marked MediaWiki-Vagrant for translation
- (diff | hist) . . **MediaWiki-Vagrant**; 13:17 . . (-38) . . Frimelle (talk | contribs)
- (diff | hist) . . **Talk:VisualEditor**; 02:57 . . **(+582)** . . Alsee (talk | contribs) *(→Success Criteria)*
- (Page translation log); 02:44 . . Shirayuki (talk | contribs) marked MediaWiki 1.21 for translation
- (diff | hist) . . m **MediaWiki 1.21**; 02:43 . . (+1) . . Shirayuki (talk | contribs) *(dummy edit to update translation pages)*
- (Page translation log); 02:43 . . Shirayuki (talk | contribs) marked MediaWiki 1.21 for translation

**21 April 2015**

- (diff | hist) . . **Extension talk:Semantic Forms**; 19:48 . . **(+640)** . . 109.158.179.155 (talk) *(→Getting CSS codes in dropdown list items when using a mapping template)*

# PENDING REVIEWS

# HOW WELL ARE WE DOING WITH REVIEWERS?
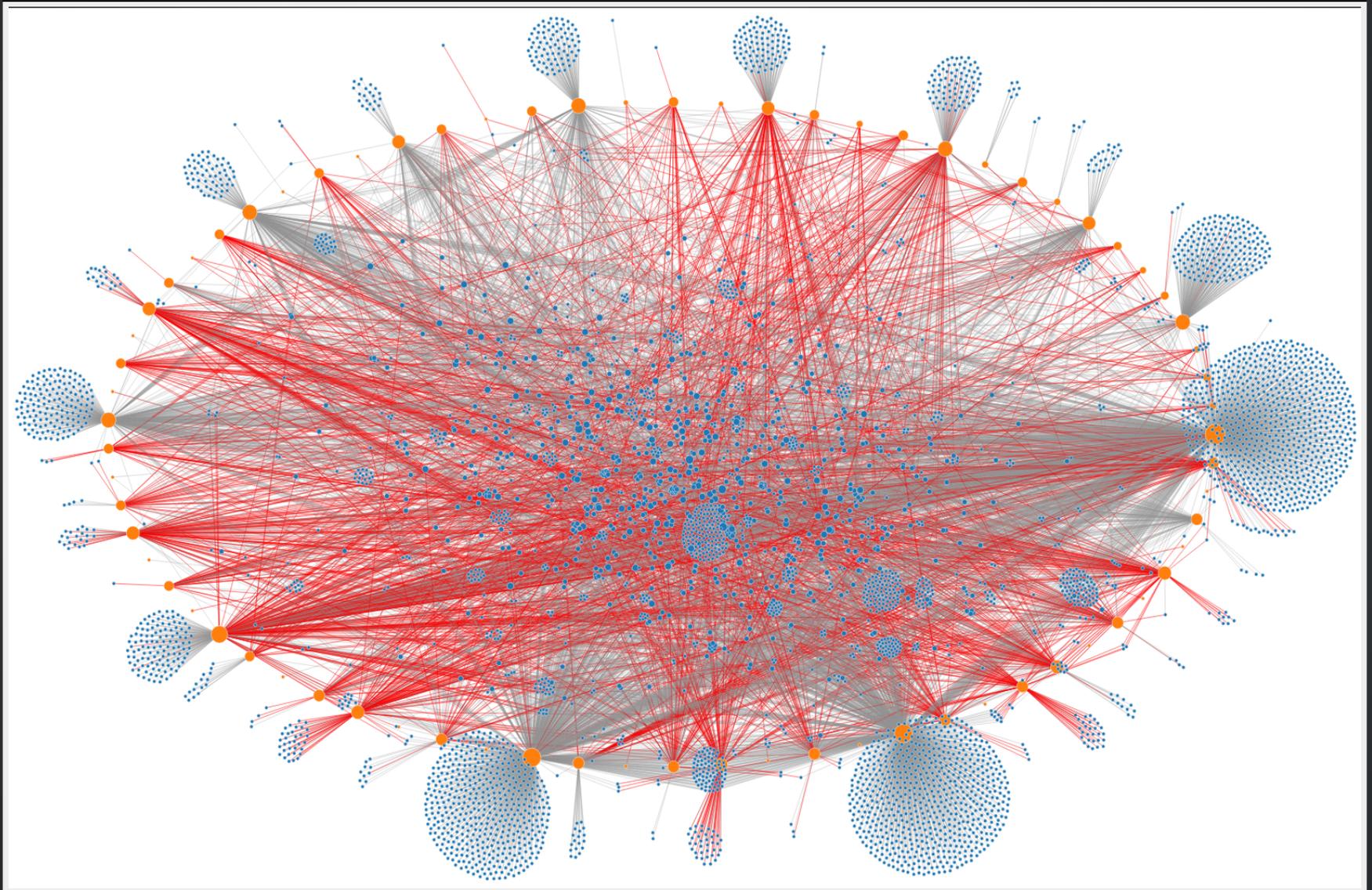
# BIG IMPROVEMENTS
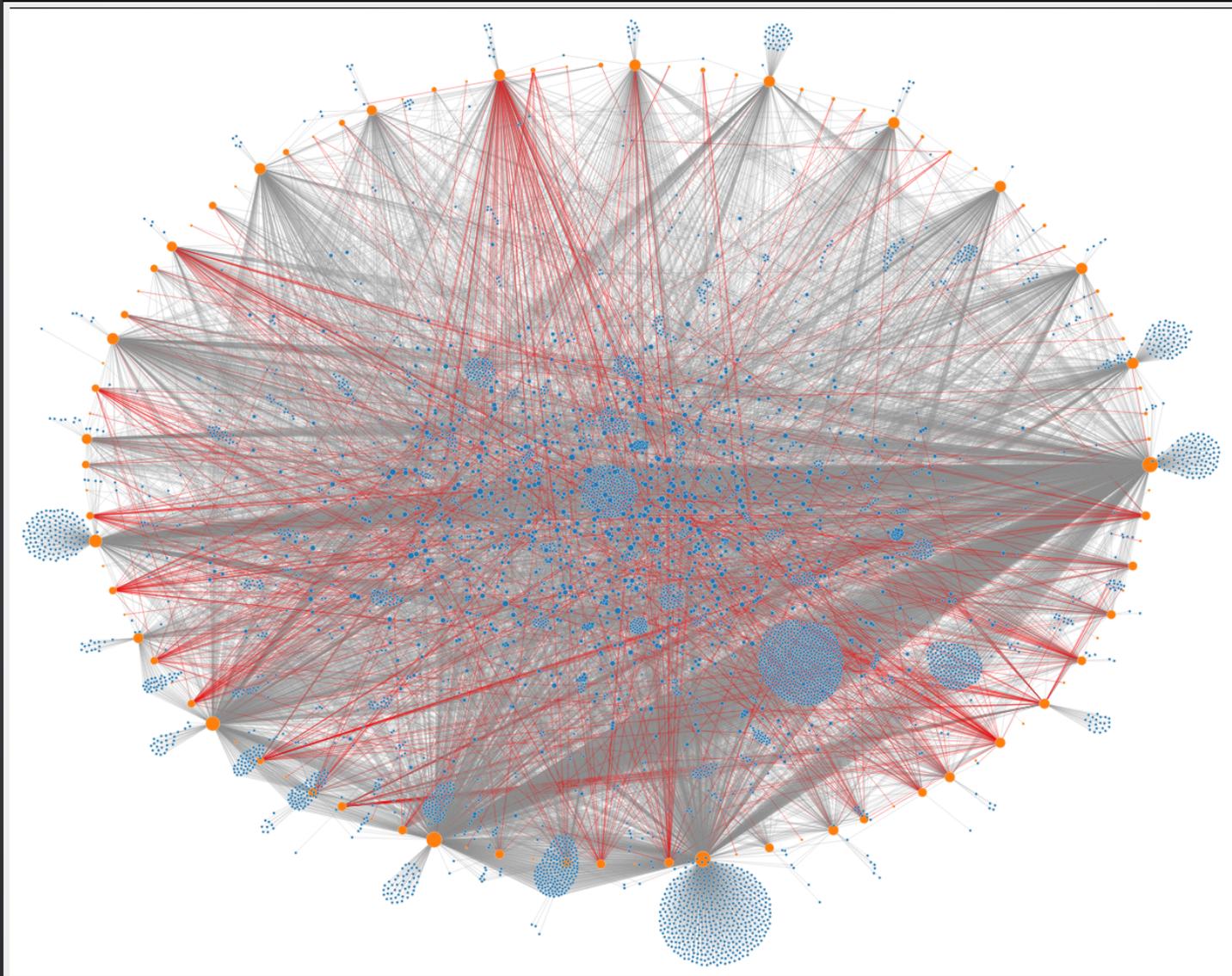
# AT THE BOTTOM OF PENDING REVIEWS

# WATCH SUGGESTIONS

**Heat Exchanger**

[Display 3 changes since last visit]   [view page history]

- *13 April* User:Doris approved a revision
- *14 April* User:Joe made an edit **without a summary**
- *14 April* User:Joe made an edit with summary: *Fixed installation procedure step 5*

## This wiki needs your help watching pages

Few (if any) people are watching the pages below. They are related to other pages in your watchlist, and it'd real swell if you could help by watching some of them.

1. **Watch:** Manifest Dependencies
2. **Watch:** Johnson Space Center
3. **Watch:** Space Shuttle
4. **Watch:** Control Moment Gyroscope
5. **Watch:** EVA Skills 1
6. **Watch:** P1 ATA R&R
7. **Watch:** Expedition 2
8. **Watch:** 40S
9. **Watch:** Expedition 5
10. **Watch:** ISS OCAD 12345
11. **Watch:** 38S
12. **Watch:** Expedition 9
13. **Watch:** 6" Wobble Socket
14. **Watch:** Expedition 14
15. **Watch:** FGB
16. **Watch:** EVA Ratchet
17. **Watch:** 34S
18. **Watch:** EVA Hammer
19. **Watch:** Expedition 17
20. **Watch:** ISS Joint Airlock

# WATCH SUGGESTIONS: REAL CONVERSATION

*Disclaimer: the names are fake and the words are paraphrased, but the conversation is real.*

The other day Amy and Bob were heckling each other about who was watching more pages.

- Amy: "I'm watching almost as many pages as our boss...I'm going to get more than her!"
- Bob: "It just seems to randomly suggest pages to me, though. Why would I care about Rule #12345?"
- Amy: "Well, that rule page is about your hardware."
- Bob: "Oh, well maybe I do want to watch that!"

# HOW HAS WATCH SUGGESTIONS HELPED?

Watch Suggestions Installed

Pages with 1 watcher

Pages with 2 watchers

Pages with 3-5 watchers

Pages with 6+ watchers
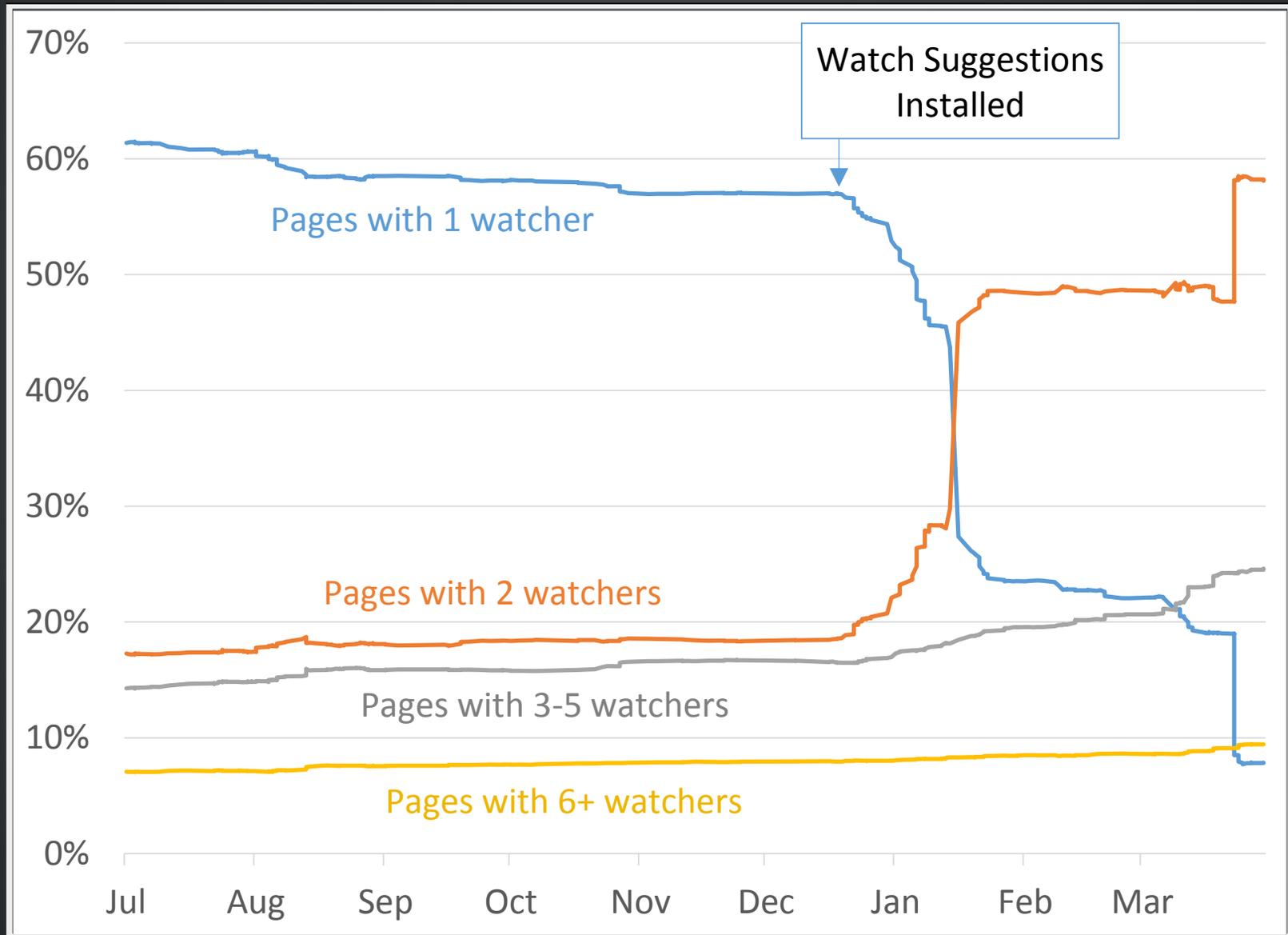
# BACK TO QUANTIFYING ACCOUNTABILITY

1. Determine number of reviewers for each page
2. Determine a way to rate contributors
3. Combine (1) and (2) to identify weak points in our data
4. Address weak points

# RATING REVIEWERS

- Accuracy
- Thoroughness
- Impartiality
- Variance across topics
- Probability of correctness

# CORRECTNESS SCORE

# ENGAGEMENT SCORE

- Frequency and recency of editing
- Time between changes and reviews
- Use of page history and diff
- Time spent on each revision
- Quantity and age of pending reviews

# USER STATISTICS

## Watch Analytics: Users

**The state of the Wiki:** 29014 watches of which 0.1% (42) are pending

**View:**

- Page watch statistics
- **User watch statistics**
- Wiki historical watch statistics
- Visualization of all watches

First page    Previous page    Next page    Last page

| User | # watches | # pending watches | % pending | Max pending time | Average pending time | ▲Engagement score |
|------|-----------|-------------------|-----------|------------------|----------------------|-------------------|
| Bob | 1108 | 35 | 3.1588 | 54 days | 29 days | 0.533 |
| Larry | 8093 | 3 | 0.0371 | 17 days | 12 days | 0.869 |
| Susan | 8085 | 1 | 0.0124 | 1 day | 1 day | 0.980 |
| Sarah | 96 | 2 | 2.0833 | 12 hours | 11 hours | 0.980 |
| George | 164 | 1 | 0.6098 | 22 hours | 22 hours | 0.990 |

# PAGE WATCH QUALITY

| | | | | | | |
|---|---|---|---|---|---|---|
| **First page** | **Previous page** | **Next page** | **Last page** | | | |

| page | # watches | # reviewed watches | % pending | Max pending time | Average pending time | ▲ Watch quality |
|---|---|---|---|---|---|---|
| International Space Station (Watch) | 1 | 1 | 0.0000 | | | 0.517 |
| Space Shuttle (Watch) | 1 | 1 | 0.0000 | | | 0.635 |
| Apollo 13 (Watch) | 1 | 1 | 0.0000 | | | 0.892 |

# PAGE WATCH QUALITY

# CULTURE CHANGES

# VOLUNTARY VS. ENTERPRISE

- Contributing because you want to
- Contributing because you are paid to

# GOALS

*Without continuous contributions and qualified reviews from everyone in your community, a wiki is just another dumpster of outdated and unreliable information.*

# REVIEW INITIAL GOALS

1. Determine number of reviewers for each page
2. Determine a way to rate contributors
3. Combine (1) and (2) to identify weak points in our data
4. Address weak points

# REVIEW SHORT TERM GOALS

1. Encourage users to do their reviews
2. Eliminate singly-watched pages

# OUR GOALS FROM A DIFFERENT VIEW

1. Increase number of watchers for each page
2. Increase frequency of reviews performed on each page
3. Increase quality of reviews performed on each page

# REFOCUS OUR GOALS

*Instead of focusing on adding content, our focus is now on the quality of our content.*

Even Wikipedia is criticized for focusing on quantity over quality
(Source)

# TARGET BEHAVIOR

- Watch Pages
- Edit often
- Review promptly
- Use page history and diff tool
- Review carefully
- Maintain low pending review count

# WHO ARE OUR USERS?

# EVA GROUP ANALYSIS

- 743 viewers
- 100 contributors
- 47 active contributors

# RANGE OF RESPONSE

- Early adopters
- Those that began using after some help and motivation
- Viewers, but not contributors
- Viewers, contributors, but not reviewers
- Stubborn, refuse to even view the wiki

# MOTIVATION

Extrinsic vs. Intrinsic

# INTRINSIC MOTIVATION

- Competence
- Autonomy
- Relatedness

# USER PERSONALITY TYPES

Based on an interview with Amy Jo Kim

- Competitors - Act on other users (challenge, showoff, compare)
- Self-Expressers - Act on content (create, build, design, customize)
- Explorers - Interact with content (view, collect, review, curate)
- Collaborators - Interacting with users (share, comment, help)

# ONLINE COMMUNITIES

- In a zero-sum game, we are opponents: One wins, others lose
- In a non-zero-sum game, we are partners: We all win or we all lose

# USER ACTIVITY LOOPS

# THE WIKI POLICE!

# EDUCATIONAL TOOLS

- Welcome e-mail
- Tutorial pages
- Semantic Forms
- Screencasts
- Guided Tours

# MEETING MINUTES

# SUBJECT MATTER EXPERT

# PENDING REVIEWS

Preferences   My pending reviews (0)   Contributions

Preferences   **My pending reviews (1 review, oldest = 19 days)**   Contributions

Watch Suggestions

# WHAT WE'VE BEEN MISSING

- Have we accounted for all four personality types?
  - Competition
  - Self-Expression
  - Exploration
  - Collaboration
- Have we provided for intrinsic motivation?
  - Competence
  - Autonomy
  - Relatedness

# WHAT WE PLAN TO ADD

# TARGET BEHAVIOR

- Watch Pages
- Edit often
- Review promptly
- Use page history and diff tool
- Review carefully
- Maintain low pending review count

These behaviors are directly related to our new scores:

- User Engagement Score
- Page Scores

These are still in development

# THANKS

- (cur | prev) ○ 11:04, 22 July 2014 Sgeffert (Talk | contribs | block) . . (23,150 bytes) (+164) . . (→Crew Consensus Reports) (undo | thank)

# FUN

# GAMIFICATION FRAMEWORK

1. Define objectives
2. Delineate target behaviors
3. Describe players
4. Devise activity loops
5. Don't forget the fun
6. Deploy the appropriate tools

Source: Professor Kevin Werbach, Wharton, University of Pennsylvania (Coursera)

# RESOURCES

- Extension:WatchAnalytics
- Extension:MeetingMinutes

# CONTACTS

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- Stephanie Johnston