

WIKI ACCOUNTABILITY

James Montalvo - Daren Welsh - Stephanie Johnston

(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

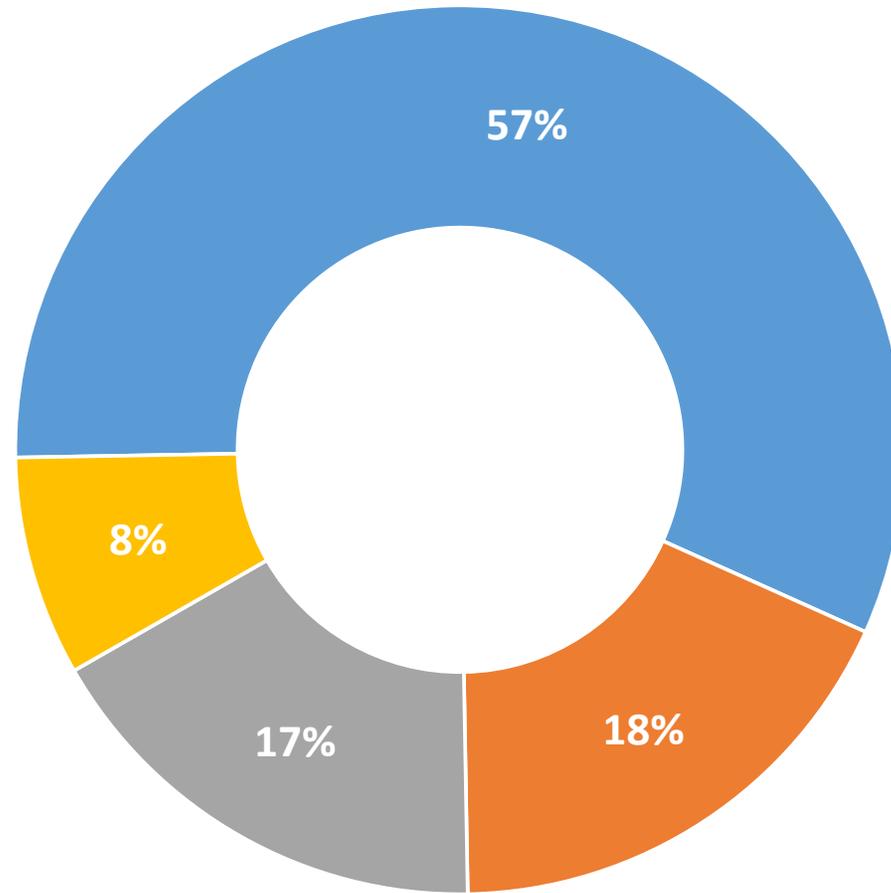
WIKIPEDIA SCALE: LOW END

- [[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

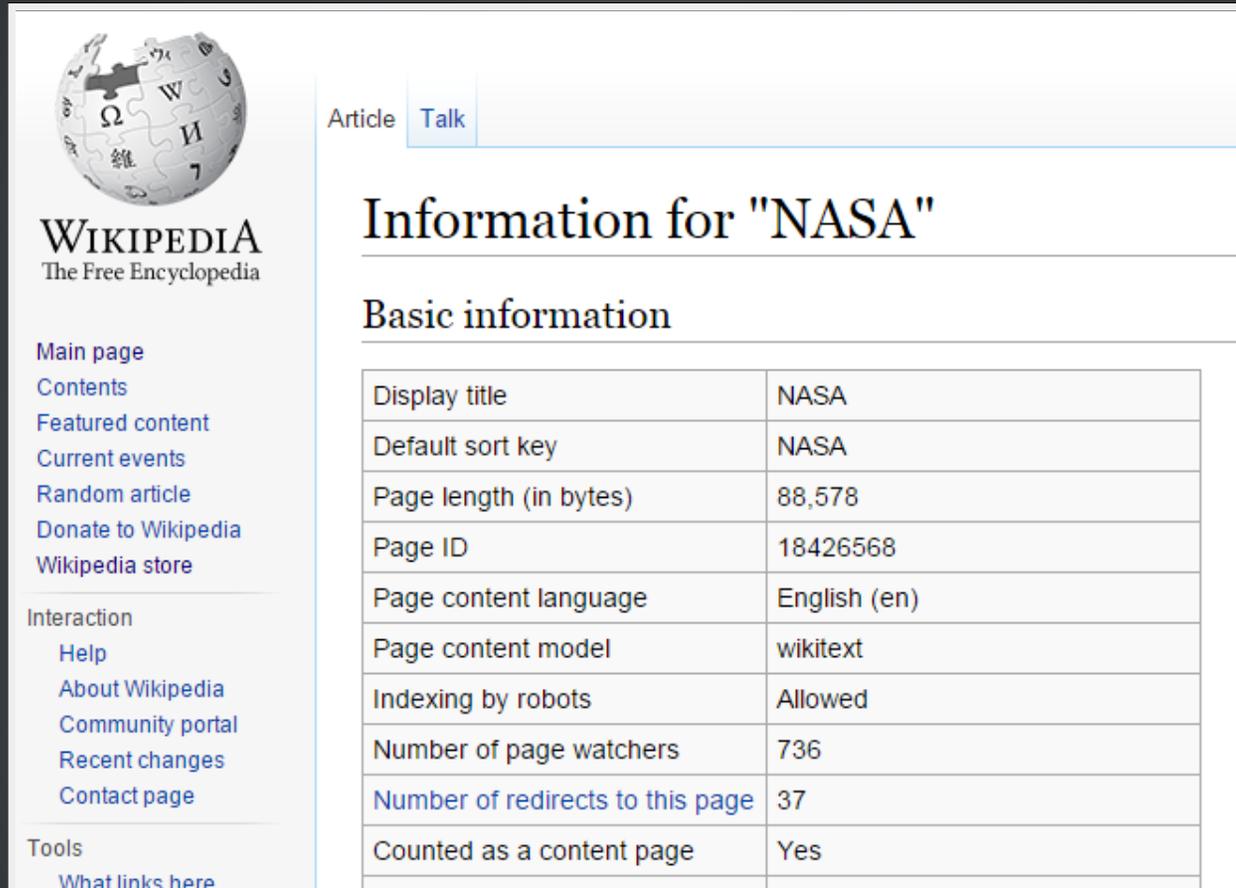


■ 1 watcher ■ 2 watchers ■ 3-5 watchers ■ 6+ watchers

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



The screenshot shows a Wikipedia article page for "NASA". The left sidebar contains the Wikipedia logo, navigation links (Main page, Contents, Featured content, Current events, Random article, Donate to Wikipedia, Wikipedia store), interaction links (Help, About Wikipedia, Community portal, Recent changes, Contact page), and tools (What links here). The main content area has tabs for "Article" and "Talk". The title is "Information for 'NASA'", and the section is "Basic information". A table lists various metadata for the page.

Display title	NASA
Default sort key	NASA
Page length (in bytes)	88,578
Page ID	18426568
Page content language	English (en)
Page content model	wikitext
Indexing by robots	Allowed
Number of page watchers	736
Number of redirects to this page	37
Counted as a content page	Yes

WHAT MEDIAWIKI ALREADY DOES




WIKIPEDIA
The Free Encyclopedia

Main page
Contents
Featured content
Current events
Donate to Wikipedia
Wikipedia store

Tools
What links here
Related changes
Upload file
RTRC
Special pages
Permanent link
Page information
Wikidata item
Cite this page

More information about this page

Jamesmontalvo3 0 Talk Sandbox Preferences Beta Watchlist Contributions Log out

Article Talk Read Edit source Edit View history ☆ Search

NASA

From Wikipedia, the free encyclopedia

Coordinates:  38°52′59″N 77°0′59″W

For other uses, see [NASA \(disambiguation\)](#).

The **National Aeronautics and Space Administration (NASA)** is the United States government agency responsible for the civilian space program as well as aeronautics and aerospace research.

President Dwight D. Eisenhower established the National Aeronautics and Space Administration (NASA) in 1958^[5] with a distinctly civilian (rather than military) orientation encouraging peaceful applications in space science. The National Aeronautics and Space Act was passed on July 29, 1958, disestablishing NASA's predecessor, the National Advisory Committee for Aeronautics (NACA). The new agency became operational on October 1, 1958.^{[6][7]}

Since that time, most U.S. space exploration efforts have been led by Apollo moon-landing missions, the Skylab space station, and later the Space Shuttle. Currently, NASA is supporting the

National Aeronautics and Space Administration



Seal of NASA

WHAT MEDIAWIKI ALREADY DOES

Special page

Unwatched pages

Showing below up to **50** results starting with #1.

View (previous 50 | next 50) (20 | 50 | 100 | 250 | 500)

1. [SharePoint](#) (Watch)
2. [Confluence](#) (Watch)
3. [Windows Vista](#) (Watch)
4. [Lotus Notes](#) (Watch)

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:

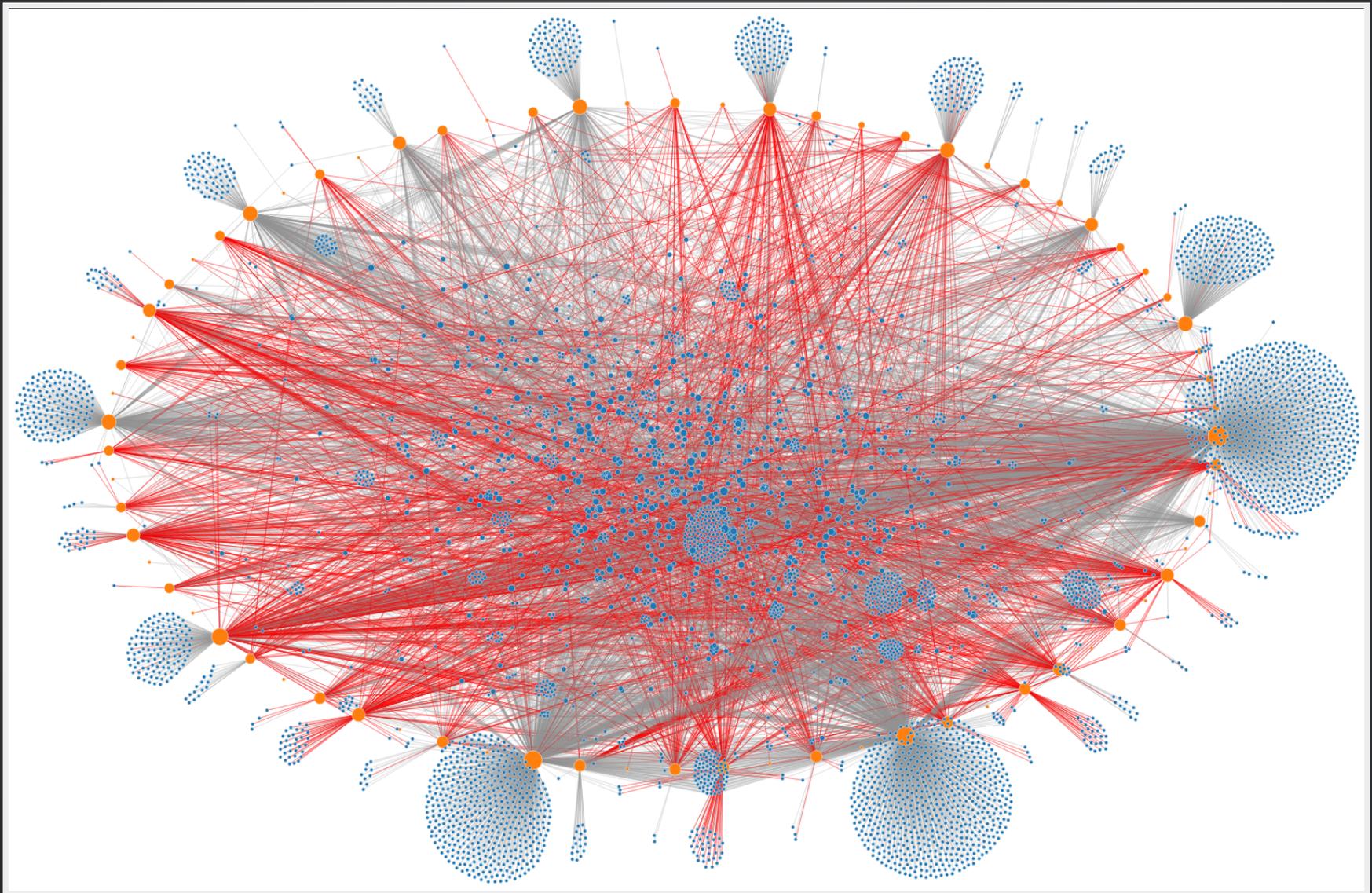
 First page

 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



The screenshot shows a Wikipedia article for NASA. At the top right, the user 'Jamesmontalvo3' is logged in, and the 'Watchlist' link is highlighted with a mouse cursor. A tooltip above the link reads 'The list of pages you are monitoring'. The article title is 'NASA', and the text describes it as the National Aeronautics and Space Administration, a United States government agency responsible for civilian space programs and aeronautics research. The article mentions that President Dwight D. Eisenhower established NASA in 1958. To the right of the text is the NASA seal, which features a yellow sun, a red satellite, and a white planet against a blue background with stars. The seal is surrounded by the text 'NATIONAL AERONAUTICS AND SPACE ADMINISTRATION' and 'U.S.A.' Below the seal is the caption 'Seal of NASA'. On the left side of the page, there is a sidebar with various navigation links such as 'Main page', 'Contents', 'Featured content', 'Current events', 'Random article', 'Donate to Wikipedia', 'Wikipedia store', 'Interaction', 'Help', 'About Wikipedia', 'Community portal', 'Recent changes', 'Contact page', 'Tools', 'What links here', and 'Related changes'.

Jamesmontalvo3 0 Talk Sandbox Preferences Beta **Watchlist** Contributions Log out

The list of pages you are monitoring

Article Talk Read Edit source Edit View history ☆ Search

NASA

From Wikipedia, the free encyclopedia

Coordinates: 38°52′59″N 77°0′59″W﻿ / ﻿﻿ / ﻿

For other uses, see [NASA \(disambiguation\)](#).

The **National Aeronautics and Space Administration** (**NASA**) is the [United States government](#) agency responsible for the civilian [space program](#) as well as [aeronautics](#) and [aerospace](#) research.

President [Dwight D. Eisenhower](#) established the National Aeronautics and Space Administration (NASA) in 1958^[5] with a distinctly civilian (rather than military) orientation encouraging peaceful applications in [space science](#). The [National Aeronautics and Space Act](#) was passed on July 29, 1958, disestablishing NASA's predecessor, the [National Advisory Committee for Aeronautics](#) (NACA). The new agency became operational on October 1, 1958.^{[6][7]}

National Aeronautics and Space Administration



Seal of NASA

Main page
Contents
Featured content
Current events
Random article
Donate to Wikipedia
Wikipedia store

Interaction
Help
About Wikipedia
Community portal
Recent changes
Contact page

Tools
What links here
Related changes

CONFUSING WATCHLIST



MediaWiki

Main page
Get MediaWiki
Get extensions
Tech blog
Contribute

Support
User help
FAQ
Technical manual
Support desk
Communication

Development
Bug tracker
Code repository
Code docs

[English](#) [Jamesmontalvo3](#) [Talk](#) [Preferences](#) [Beta](#) [Watchlist](#) [New messages \(157\)](#) [Contributions](#) [Log out](#)

Special page Search

Watchlist

For Jamesmontalvo3 ([View relevant changes](#) | [View and edit watchlist](#) | [Edit raw watchlist](#) | [Clear the watchlist](#))

85 pages on your watchlist, not separately counting talk pages. Email notification is enabled. Pages that have been changed since you last visited them are shown in **bold**.

Watchlist options

Below are the last 8 changes in the last 72 hours, as of 23 April 2015, 21:25.
Show last 1 | 2 | 6 | 12 hours 1 | 3 | 7 | 30 days
[Hide minor edits](#) | [Hide bots](#) | [Hide anonymous users](#) | [Hide registered users](#) | [Hide my edits](#)

Namespace: Invert selection Associated namespace

Legend: [\[Collapse\]](#)
N This edit created a new page (also see [list of new pages](#))
m This is a minor edit
b This edit was performed by a bot
(±123) The page size changed by this number of bytes

CONFUSING WATCHLIST, PART 2

<p>Browse categories</p> <p>Community portal</p> <p>Recent changes</p> <p>Current issues</p> <p>Sandbox</p>	<p>23 April 2015</p> <ul style="list-style-type: none">• (diff hist) . . m VisualEditor; 13:56 . . (-14) . . Syum90 (talk contribs) (<i>Reverted edits by 109.237.244.202</i> (talk) to last revision by Neil P. Quinn-WMF)
<p>Tools</p> <p> Atom</p> <p>Upload file</p> <p>Special pages</p> <p>Printable version</p> <p>Project Status</p>	<p>22 April 2015</p> <ul style="list-style-type: none">• (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) . . Asee (talk contribs) (<i>→Success Criteria</i>)• (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) (<i>dummy edit to update translation pages</i>)• (Page translation log); 02:43 . . Shirayuki (talk contribs) marked MediaWiki 1.21 for translation
<p>In other languages</p>	<p>21 April 2015</p> <ul style="list-style-type: none">• (diff hist) . . Extension talk:Semantic Forms; 19:48 . . (+640) . . 109.158.179.155 (talk) (<i>→Getting CSS codes in dropdown list items when using a mapping template</i>)

PENDING REVIEWS

Special page



Pending reviews

You have 3 pending reviews.

Weekly Group Meeting - 2015/02/20

Display 1 change since last visit

[view page history](#)

- 9 April [User:Joe](#) made an edit with summary: *Added some important information*

International Space Station

Display 2 changes since last visit

[view page history](#)

- 2 April [User:Joe](#) made an edit **without a summary**
- 2 April [User:Jane](#) made an edit with summary: *Reverted edits by Joe (talk) to last revision by Bob*

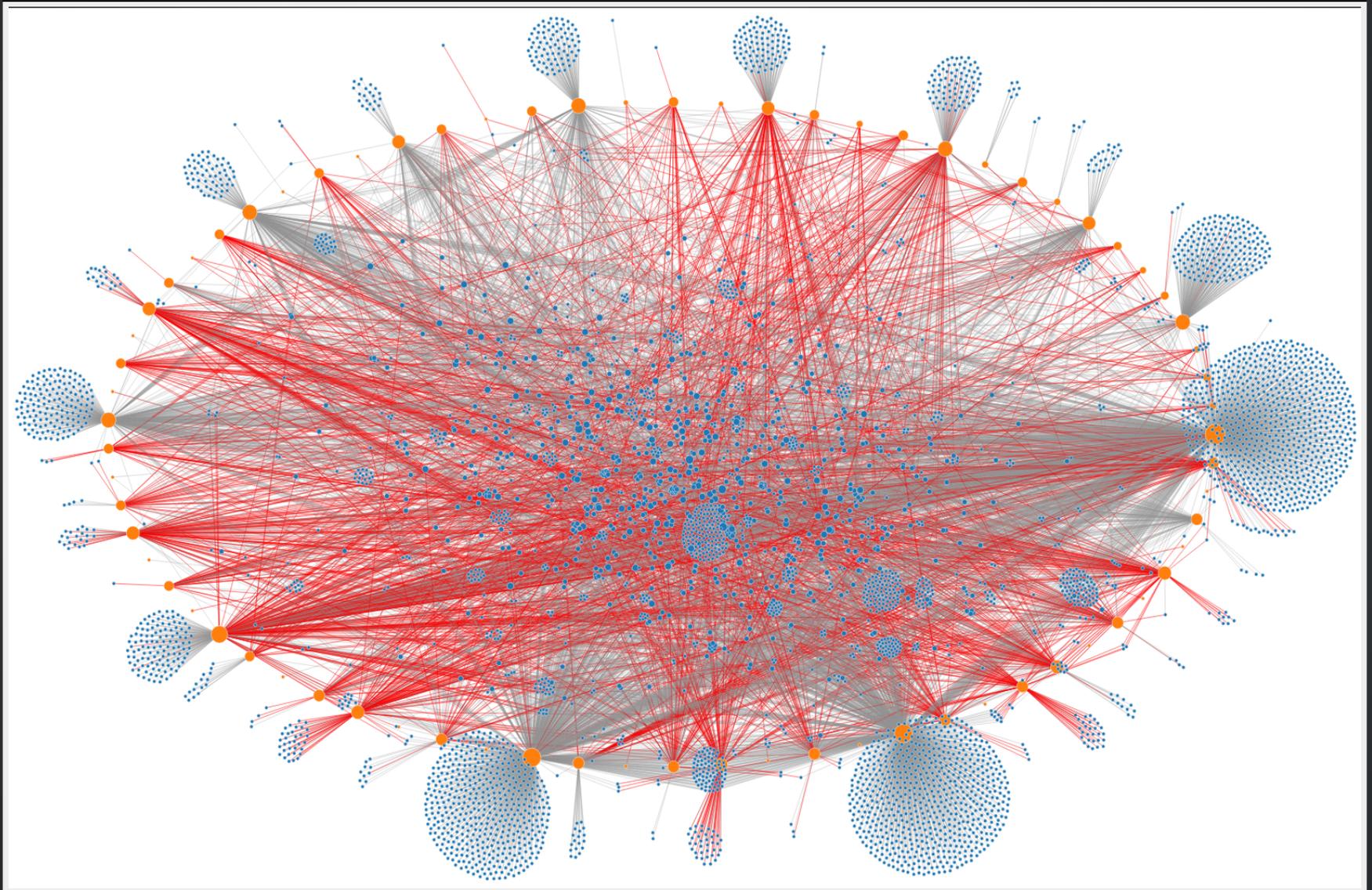
Heat Exchanger

Display 3 changes since last visit

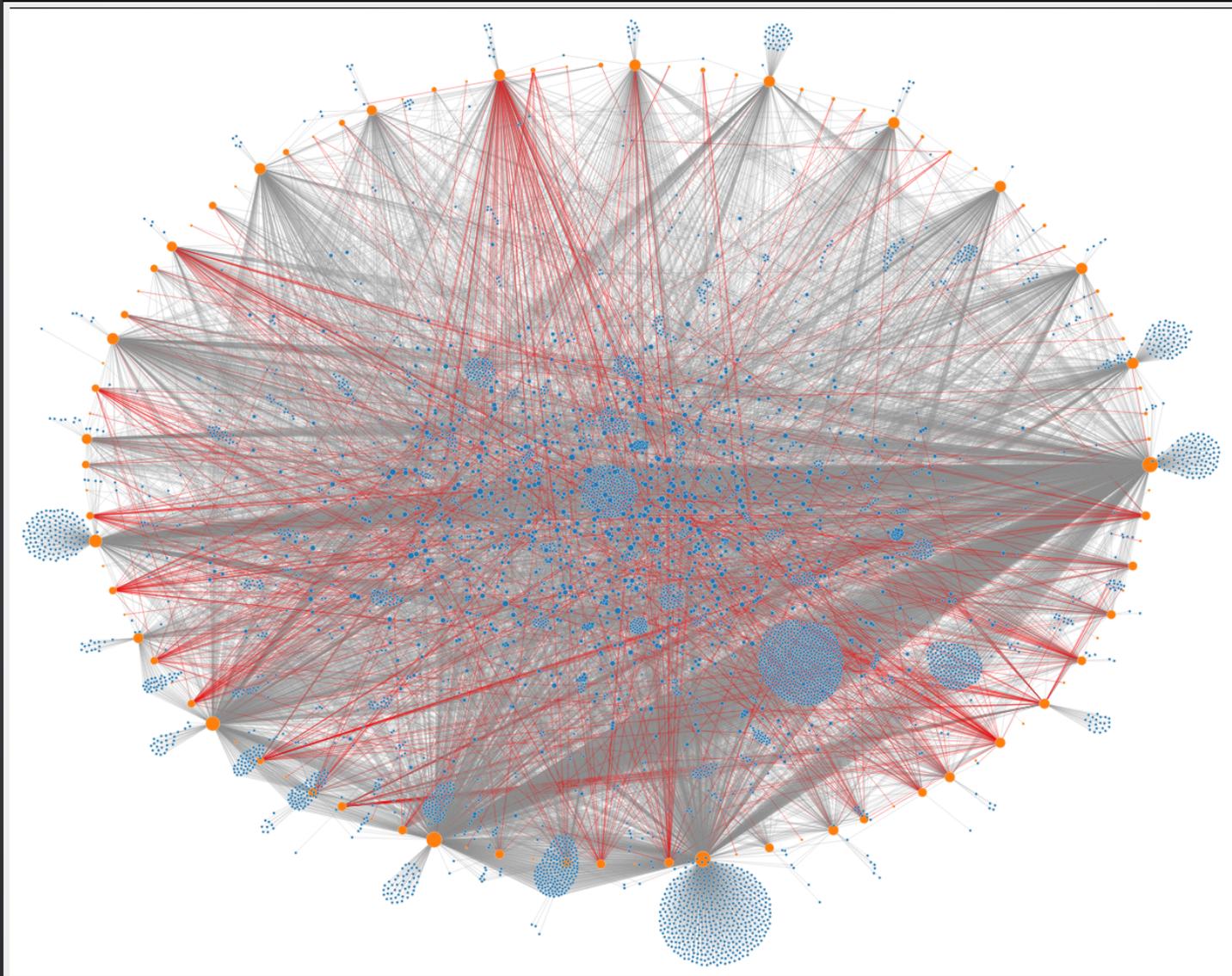
[view page history](#)

- 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*

HOW WELL ARE WE DOING WITH REVIEWERS?



BIG IMPROVEMENTS



AT THE BOTTOM OF PENDING REVIEWS

James 0 [Talk](#) [Admin links](#) [Preferences](#) [My pending reviews \(3\)](#) [Contributions](#)

Special page

Pending reviews

You have 3 pending reviews.

Weekly Group Meeting - 2015/02/20	Display 1 change since last visit	view page history
<ul style="list-style-type: none">9 April User:Joe made an edit with summary: <i>Added some important information</i>		
International Space Station	Display 2 changes since last visit	view page history
<ul style="list-style-type: none">2 April User:Joe made an edit without a summary2 April User:Jane made an edit with summary: <i>Reverted edits by Joe (talk) to last revision by Bob</i>		
Heat Exchanger	Display 3 changes since last visit	view page history
<ul style="list-style-type: none">13 April User:Doris approved a revision14 April User:Joe made an edit without a summary14 April User:Joe made an edit with summary: <i>Fixed installation procedure step 5</i>		

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](#)

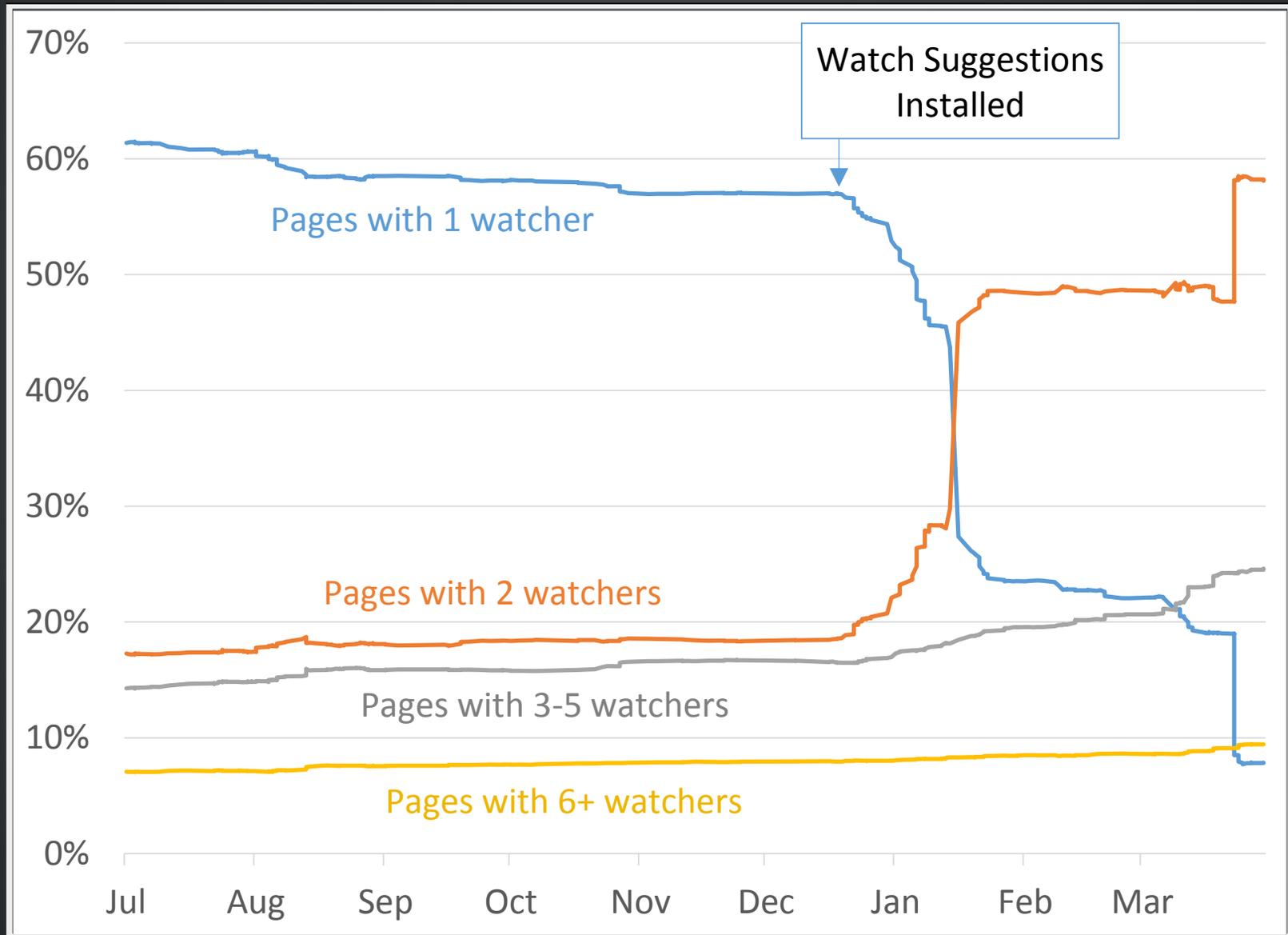
WATCH SUGGESTIONS: REAL CONVERSATION

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?



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

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

James 0 Talk Admin links Preferences My pending reviews (0) Contributions

Page Discussion Read Edit View history ☆ Search

International Space Station

Watch Quality 0.6 Review Status 0

Contents [hide]

- 1 Purpose
- 2 Life Aboard
 - 2.1 Crew Operations
 - 2.2 Food
 - 2.3 Hygiene
 - 2.4 Repairs

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

Create Meeting Minutes

Remember...

Save often or use a [text editor](#). Revisions are free. Also, if there is anything you don't know how to do, see the [help page](#) for more info.

Meeting Details

Meeting name	<input type="text"/>
Meeting date	<input type="text"/> : <input type="text"/>
Start time	<input type="text"/> : <input type="text"/> (24-hour time, please)
Notes taken by	<input type="text"/>

Meeting Files

Local File Name or URL	<input type="text"/>			
Alternate name	<input type="text"/>			

Add File

Meeting Topics

Add Topic

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

[EnterpriseMediaWiki.org](#) ([github](#) / [@enterprisemw](#))

- James Montalvo ([github](#) / [@jamesmontalvo3](#))
- Daren Welsh ([github](#) / [@darenwelsh](#))
- Stephanie Johnston