



Mobile contribution research

Abbey Ripstra | February 2019

Table of Contents

P.3-4	Why this research?
P.5-8	Why do (and don't) people edit Wikipedia on mobile devices?
P. 9-38	Insights from qualitative responses in survey
P.39-45	Some more things to consider about designing for mobile contribution
P. 46-80	Which tasks and workflows should be prioritized on mobile platforms?
P. 81-83	Why people switch to desktop site on mobile devices
P. 84-86	Why people use more than one mobile device.
P. 87-90	Participants' perceived performance of mobile platforms.
P. 92-124	Appendix <ul style="list-style-type: none">• How we know why people do and don't edit on mobile• Another framework for assessing ease of use of tasks• Details about perceived performance

Why do this research?

To answer the questions...

- Why do (and don't) new and experienced Wikipedia contributors use mobile devices for contribution?
- Which types of contribution workflows and tasks make the most sense to provided on mobile devices?
- Which tasks should exist on mobile devices?
- How much of the ecosystem should exist on mobile?

**Why do, and don't,
people edit Wikipedia
on mobile devices?**

People edit wikipedia on mobile devices because...

- **they are on the go, not near a lap/desktop**, and mobile is most convenient to edit with while moving.
- **to do simpler, less complex editing**. More complex stuff, and accuracy is hard on mobile
- for some, **mobile is easier**.
- **some don't have access to a lap/desktop**

People don't edit wikipedia on mobile devices because...

- they **haven't tried**, or don't like editing on mobile devices.
- **screens and keyboards are too small to be comfortable or functional** for them. They prefer more accommodating sizes of screens and keyboards on lap/desktops. A few don't have mobile devices.
- they **can't access or find functionality they need on mobile**. Either it doesn't exist on mobile platforms, or they can't find it.
- **lap/desktops are easier for doing more complex editing**, and to be more efficient and accurate in their work.

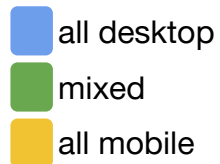
People use mobile on the go, and to do simple tasks.

Prioritize time constrained tasks and workflows not dependent on people having much time to work or ability to focus.



Who participated in the 2018 survey?

Who responded to the survey?

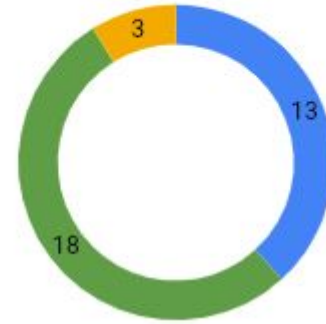
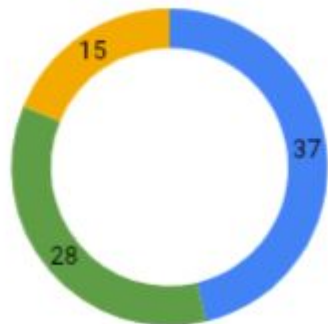
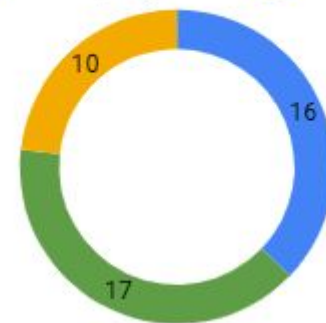
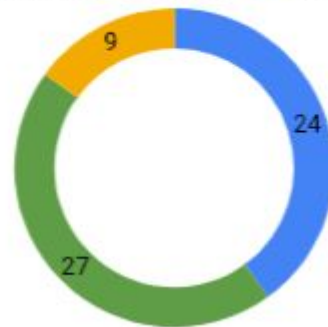


103 from
Global South

114 from
Global North

140 Experienced contributors

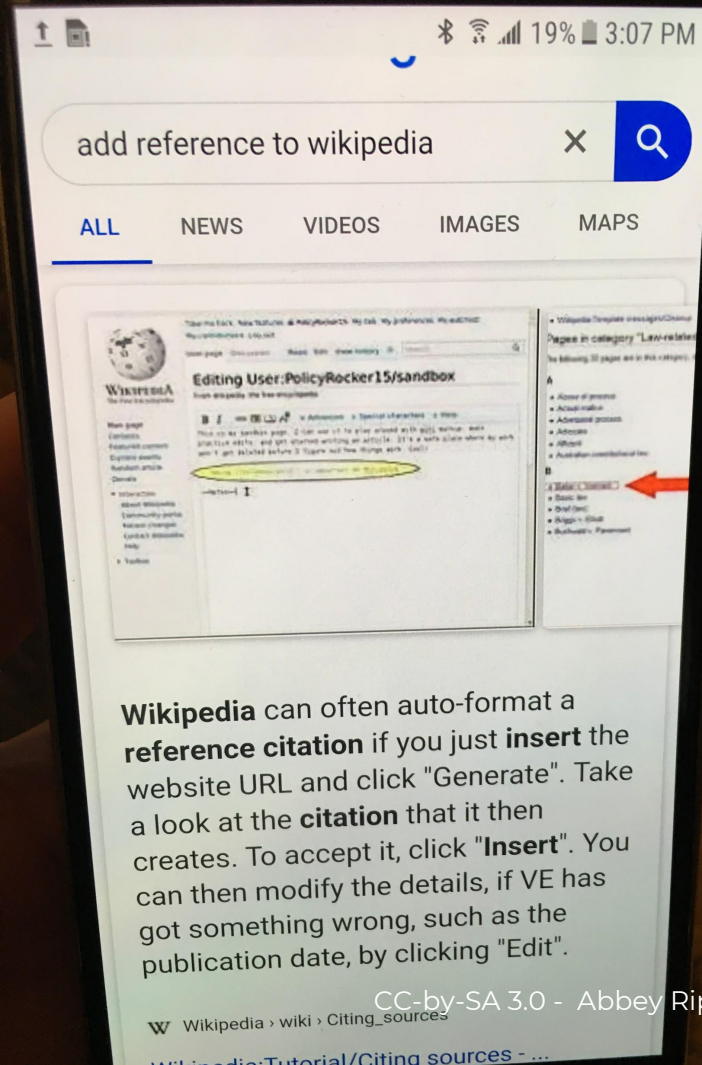
77 New contributors



Contributors need help to do tasks on mobile.

Help needs to be easy to find and understand when people need it.

(especially for, but not limited to new editors)



1. Tasks and workflows that are hard for new contributors, are easier for experienced contributors on same platform (see mobile web).
2. Some tasks and workflows are still hard for experienced editors. They need some easy to access help on mobile too.

Contribution task ratings from 2018 survey

New Editors	Smartphone & App			Smartphone & mobile web			Smartphone switched to desktop			Laptop / Desktop					
	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard
Fixing typos				20	11	8	1	55%				25	8	0	76%
Copy editing (fixing grammar, clarifying meaning)				16	7	7	2	44%				23	2	2	85%
Updating article content with new information				14	8	3	4	57%				23	5	6	68%
Expanding content of existing articles				12	7	2	3	58%				20	4	3	74%
Adding references / citations to articles				7	2	3	2	29%				9	7	3	47%
Adding Wikipedia links to articles				3	3	2	3	38%				17	6	0	74%
Adding captions to media in articles				7	2	4	2	25%				2	4	2	25%
Adding media to articles (photos, videos, images)				5	2	1	2	40%				2	1	2	40%
Extending lists within articles				6	3	2	1	50%				8	3	3	73%
Adding / editing Wikidata content on articles				8	2	3	3	25%				9	2	3	64%
Translating content from one language Wikipedia to another				7	3	2	2	43%				7	3	3	54%
Creating new articles				8	3	1	4	38%				6	4	4	43%
												20			20%

Experienced Editors	smartphone and app			smartphone and mobile web			switched to desktop			laptop / desktop									
	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard				
Fixing typos	23	9	1	62	46	15	1	74%	16	5	1	95	6	0	94%				
Copy editing (fixing grammar, clarifying meaning)	14	5	0	50	37	13	0	94%	14	2	1	82	4	0	94%				
Updating article content with new information	8	5	0	33	25	8	0	86%	14	12	2	86	8	2	90%				
Expanding content of existing articles	4	3	1	50	17	7	0	68%	11	7	4	64	85	5	92%				
Adding references / citations to articles	4	3	0	57%	24	12	10	2	50%	11	6	3	2	55%	87	53	27	7	61%
Adding Wikipedia links to articles	8	4	0	82%	32	21	9	2	66%	12	10	3	1	83%	86	77	9	90%	
Adding captions to media in articles	2	2	1	40%	17	10	3	4	59%	7	4	2	1	57%	48	39	7	2	81%
Adding media to articles (photos, videos, images)			0%	20	10	5	5	50%	7	4	2	1	57%	60	45	12	3	75%	
Extending lists within articles	2	3	0	40%	22	13	5	4	59%	10	6	2	2	60%	60	48	11	1	80%
Adding / editing Wikidata content on articles	4	3	0	57%	20	13	7	0	65%	11	8	2	1	73%	57	36	17	4	63%
Translating content from one language Wikipedia to another				12	6	2	4	50%	6	3	1	2	50%	41	25	11	5	61%	
Creating new articles				20	10	7	3	50%	9	5	2	2	56%	73	54	14	5	74%	

What is “hard” for new editors is “easy”, or “OK I had to learn” for experienced editors on the same platform. (see lap/desktop too)

Some tasks are “OK, I had to learn” on mobile, but “easy” on lap/desktops for experienced editors.

Curation tasks ratings from the 2018 survey

New Editors	Smartphone & App				Smartphone & mobile web				Smartphone switched to desktop				Laptop / Desktop						
	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard			
Checking references for verifiability, and fixing re					8	3	3	2	38%					11	5	3	3	45%	
Patrolling, reviewing raw edit feeds looking vand					5	2	3		40%					5	4	1		80%	
Deleting / proposing deletion of articles					5	2	3		40%					5	4		1	80%	
Tagging articles for clean up					4				0%					4				0%	
Reverting edits					4				0%					5	4	1		80%	
Reviewing, approving draft articles					4				0%					3				0%	
Reorganizing articles (split, merge, re-name)					3				0%					3				0%	
Adding and/or editing categories					3				0%					4				0%	
Editing info boxes					5	1	4		20%					7	1	5	1	14%	
Experienced Editors					smartphone and mobile web				smartphone switched to desktop site				laptop / desktop						
Checking references for verifiability, and fixing references					#	easy	had to figure out	more hard		#	easy	had to figure out	more hard		#	easy	had to figure out	more hard	
Patrolling, reviewing raw edit feeds looking vandalism					15	13	2		87%	11	10	1		91%	57	43	13	1	75%
Deleting / proposing deletion of articles					14	11	2	1	79%	8	6			75%	47	36	11		77%
Tagging articles for clean up					7	5	2		71%	6	6			100%	35	25	8		71%
Reverting edits					9	6	3		67%	6	5	1		83%	36	27	9		75%
Reviewing, approving draft articles					17	12	2	3	71%	11	9	1	1	82%	53	44	8	1	83%
Reorganizing articles (split, merge, re-name)					8	7	1		88%	7	6	1		86%	20	15	5		75%
Adding and/or editing categories					7	5	2		71%	7	5	1	1	71%	21	19	9	1	90%
Editing info boxes					11	7	4		64%	8	6	2		75%	40	30	10		75%
					15	12	3		80%	7	6	1		86%	55	38	13	2	69%

Similar pattern with curation tasks, though we have less data. Maybe fewer new editors do curation.

New editors need help or reminders to...

- **use wiki syntax** to accomplish any task (learning curve)
- **find and use talk pages** (discoverability, formatting and syntax)
- properly **add references** (format, syntax, rules, what is an acceptable reference?)
- **add Wikipedia links** to articles (formatting, syntax)
- properly **format articles and sections** of articles (style, syntax) :) :)
- properly **add and extend lists** (formatting, syntax)
- **create new articles** (process, policies, formatting, talk pages, syntax)
- **add and edit Wikidata** on Wikipedia articles (discoverability, how to, syntax)

Experienced editors need help or reminders to...

- properly **format and add references** (formatting, syntax, what is an acceptable reference)
- **link** Wikipedia articles into other Wikipedia articles (formatting, syntax)

Ideas

- **Syntax and formatting library:** Provide, or start, an easy to access and use wiki syntax and formatting rules library.
- **Raise awareness of policies, and provide quick access to definitions.** (People need to know why their contributions get deleted, and when policies are abused, people need to know that, and what options they have to do something about it.)
- **Let users know what they can and can't do on each platform** (and where to find the tools or places to go to do them).

**Some things
seem* too
complicated or
aren't discoverable
on mobile.**

How can we make
things easier?

*or are

New editors find it complicated to...

- **Use talk pages:** knowing about community, finding talk pages, and communicating with community via talk pages. Just knowing about community is very important...and knowing the syntax and formatting are hard, and necessary to properly communicate.
- **Switch to the desktop site from mobile web.** On desktop they can do things they can't on mobile web. But, it is hard to discover that you can switch, and how and where to switch. People are willing to zoom, sideways scroll, have a lot of difficulty with selection and crazy scrolling to learn more, and accomplish more.

Experienced editors find it complicated to...

- **patrol for vandalism** many possibilities on mobile, some easier than others, see Twinkle.
- **add wikidata on Wikipedia articles:** Folks have contextual confusion about where on Wikipedia articles, Wikidata is, and how to edit.
- **create new Wikipedia articles:** Lots to know to do properly, AfC not designed for mobile
- **tagg articles for clean up:** Lots of back and forth between contexts and assessment, some tasks are easier than others. For example, deletion for nonsense is easy to detect and tagging is pretty straight forward if syntax is remembered.
- **create and edit info boxes:** Many different info boxes for different article types, parameters and syntax are hard to remember.
- discover that **one can edit on the Wikipedia app** is hard to **discover**.

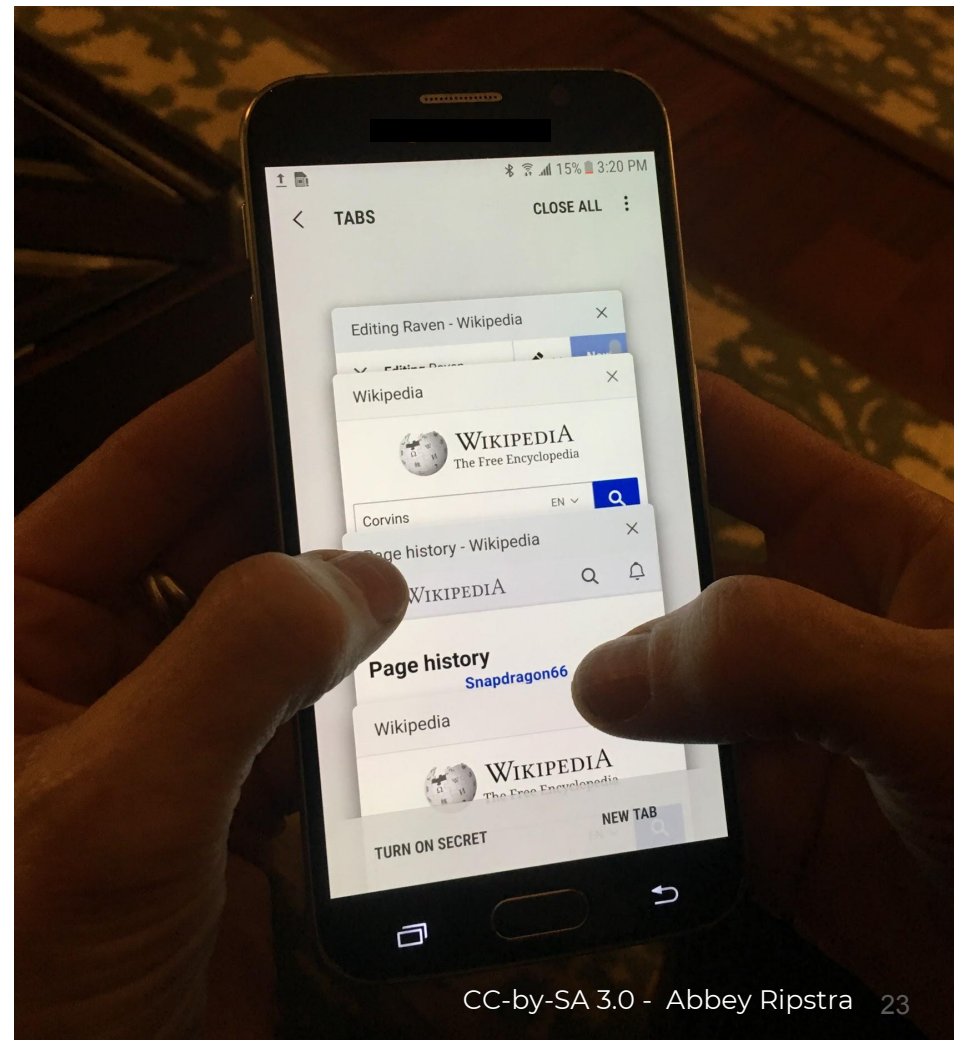
Ideas

- **Use gadgets as potential UX patterns for mobile:** Look into all the gadgets, and assess if they make sense as patterns for designing mobile workflows. Some workflows like patrolling for vandalism may be too complicated as they are done on desktop, and may need to be split into smaller tasks for mobile. Also be aware that some gadgets force (or strongly suggest) a certain outcome which can further entrench biases.
- **Easy access template repository:** including any formatting instructions, syntax and any other necessary bits of information.

**Context switching
reduces focus and
efficiency.**

**People have to
leave context
to find what they
need to act.**

How can we help
improve focus?



New editors go out of context to...

- **create and fix references:** Need to learn or remember the syntax and formatting for properly creating references, and know which format to use for a particular kind of reference.
- **create and edit infoboxes:** Learn or remember how to create or edit infoboxes, and which is appropriate for the particular article.
- **translation from one language to another:** Learn that it is possible, and how to translate content from one language to another.

Experienced editors go out of context to*...

find syntax and formatting for:

- adding, editing references and links
- how to add wikidata (specific statement name, alias, structure of statement)
- adding media to articles (discovering how, and finding media)
- adding or extending lists within articles (proper formatting, syntax)

find templates and the correct syntax and formatting:

- tagging for clean up, using templates
- creating and editing tables and infoboxes,
- translation

* These findings are all reported about lap/desktop activities. If it is this hard on lap/desktop, it is also hard on mobile.

Ideas

- **Easy to find and access wiki syntax library** Could start by adding the basic tasks to a library, that can be added to in an organized way by contributors.
- **Instructions on proper formatting and definitions of policy,** need to be close to and easily findable from the editing context.
- **Template repository** including any formatting instructions, syntax and any other necessary bits of information. (template styles?)



WIKIPEDIA
The Free Encyclopedia

- 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
- Upload file
- Special pages
- Permanent link

- Page information
- Wikidata item
- Cite this page
- Print/export
- Create a book
- Download as PDF
- Printable version

Languages

Article **Talk**

Read **Edit** Edit source View history More ▾

Search Wikipedia

Anne Wolfe

From Wikipedia, the free encyclopedia

It is **proposed that this article be deleted** because of the following concern:

Fails WP:Bio.

If you can address this concern by **improving**, **copyediting**, **sourcing**, **renaming**, or **merging** the page, **please edit this page** and do so. *You may remove this message if you improve the article or otherwise object to deletion for any reason.* Although not required, you are encouraged to explain why you object to the deletion, either in your edit summary or on the talk page. If this template is removed, **do not replace it**.

The article may be deleted if this message remains in place for seven days, i.e., after 17:11, 7 February 2019 (UTC).

If you created the article, please don't be offended. Instead, consider improving the article so that it is acceptable according to the **deletion policy**.

Find sources: "Anne Wolfe" – news · newspapers · books · scholar · JSTOR

For those of a similar name, see [Ann Wolf](#) (disambiguation).



This **biography of a living person** includes a list of **references**, related reading or **external links**, **but its sources remain unclear because it lacks inline citations**. Contentious material about living persons that is unsourced or poorly sourced **must be removed immediately**, especially if potentially **libelous** or harmful. Please help to **improve** this article by **introducing** more precise citations. *(October 2010)* *(Learn how and when to remove this template message)*

Anne Wolfe (born March 14, 1953) is an American politician. She was the 2004 **Democratic Party** candidate for the **United States House of Representatives** for **New Jersey's Fifth Congressional District**. She is married and lives in **Mahwah, New Jersey**.

Wolfe beat her only primary opponent, Frank Fracasso of Green Township, Sussex County, by a margin of more than 5–1.^[1] For her 2004 campaign, she worked with her husband, and learned from her work at the University of Pennsylvania and Yale University. She has announced that she would not run for the Democratic nomination for the House in 2006.

In the 2004 election, she received 122,259 votes or 41% compared to Republican Scott Garrett's 171,220 votes or 58% of the vote. Garrett had refused to debate Anne Wolfe several times over the campaign cycle.

Endorsements [edit Edit source]

There is pervasive lack of understanding about policies.

app

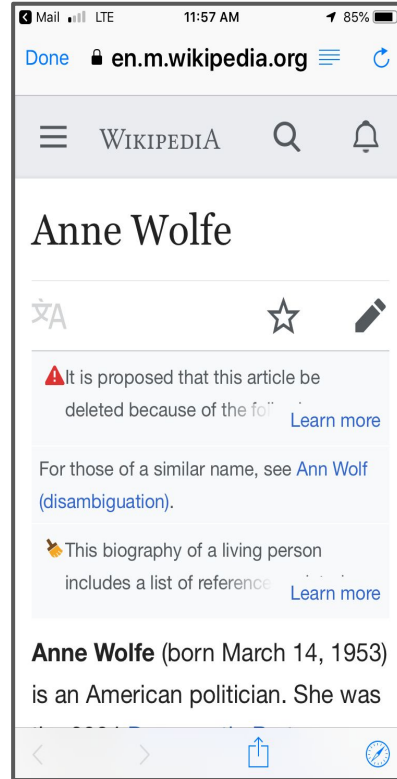


Notices do not appear on the app!

How will people know to improve?



mobile web



...and it is harder to learn about on mobile

Lack of understanding of policies reduces people's ability to confidently contribute, especially after something happens that they don't understand and don't know how to learn about *.

* For example, edits and articles being deleted without understandable reasons why.

New editors lack understanding of

- **why edits or articles get deleted.** Frustrating with no understanding, and a missed learning opportunity.
- **how to address misuse of policies:** Sometimes, edits are deleted for nefarious purposes. If a new editor experiences this (see one comment in speaker notes), they probably don't know where to go or who to talk with to get support.
 - Workflows like Twinkle make it easy and very fast to propose speedy deletion, and sometimes robots do it, making it even faster. This means that sometimes articles that are just getting started, get a speedy deletion template on them, even though they are still being created. It is difficult to address this, especially as a new editor. [1] [2]

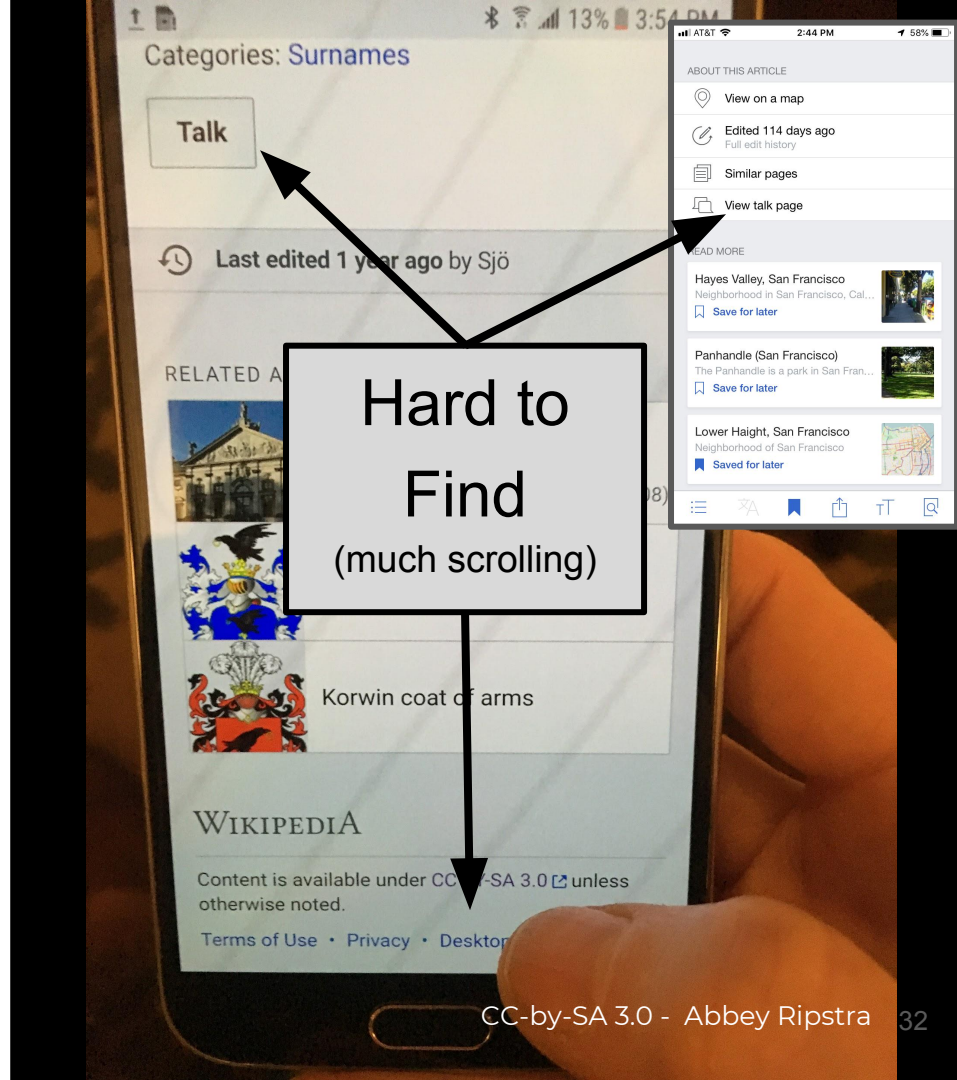
[1] Read about Stewart Geiger's experience, "Save saveMLAK" starting at the bottom of page 6 of his paper.
<https://stuartgeiger.com/articles/2017-09-26-beyond-black-box-wikipedia-bds>

Experienced editors lack understanding of

- **why edits or articles get deleted.** Some newer “experienced” editors (who have contributed more than 25 edits), have no understanding, of why their edits or articles get deleted, and have a hard time learning why deletion happens, or how to discuss it.
- **what an acceptable reference is.** (Is Breitbart, my primary research, twitter valid to use as a reference in a Wikipedia article?)
- **article draft creation, review, accept/reject process.** It is complicated, and hard to know who is involved and how to communicate with them. AfC is not designed for mobile.

**Places and tools
needed to act
are not
easy to find on
mobile.**

How can we make
it easier to
discover and
access these
places and tools.

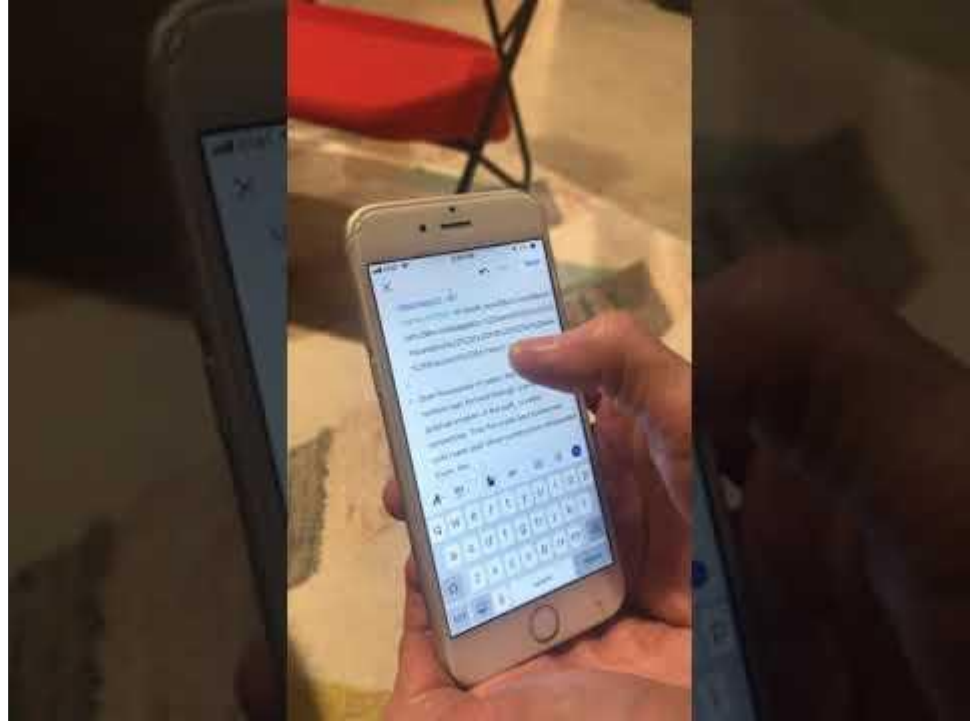


- Watchlist
- History and Diffs
- Talk pages (Very important for knowing about and connecting with community.)
- Categories (aren't currently on mobile)
- Recent changes
- Contributions
- Ability to switch to desktop from mobile web or app

When possible, make locations similar across platforms so it is easier to find these important places for those who use more than one platform.

**Navigation,
selection and
copy / paste are
particularly hard
on mobile.**

Let's make it
easier.



Copy pasting is hard for everyone on mobile

- The usually swift and simple act of **copy pasting** becomes complex in a tiny space.
- **Find in page** was requested frequently :) :)
- **Selecting text and copy pasting references** were both called out as specifically super difficult.
- **Feeling disoriented after pressing edit and publish.** Press edit, after identifying what to act on, being landed on top of the article, only to have to go find the place to act again (scrolling, reading). This is particularly true for editing on mobile switched to desktop. On app and mobile web, section editing makes this a non issue. yay!!

New editors mentioned difficulty navigating to...

- **add and edit references** (selecting text, finding references, copy pasting or creating with correct syntax and formatting)
- **add and edit info boxes** (selecting, proper syntax and formatting, and best practices)

Experienced editors mentioned difficulty navigating to...

- **add wikidata to an article**, understanding where it is and comes from, and how and where to act.
- **create, add and edit categories**: no categories on app or mobile web. Have to switch over to desktop on mobile to take action.

Some ideas

- **Think about categories and mobile.** (Consult with Structured data on Commons team.) Adding categories on mobile could be a good task to provide, as it is quick and potentially easy to do and time constrained. However, categories, as opposed to structured data statements, are not multi lingual, and not proliferate across wikis. Adding wikidata statements is confusing, and is hard to find (analogous issues to adding images to Wikipedia articles from Commons). Categories vs. adding structured data to Wikipedia articles. Something to think about and discuss...
- **Make wikidata more findable and usable on articles**, and provide information on what wikidata is, and how to contribute statements.

...to consider





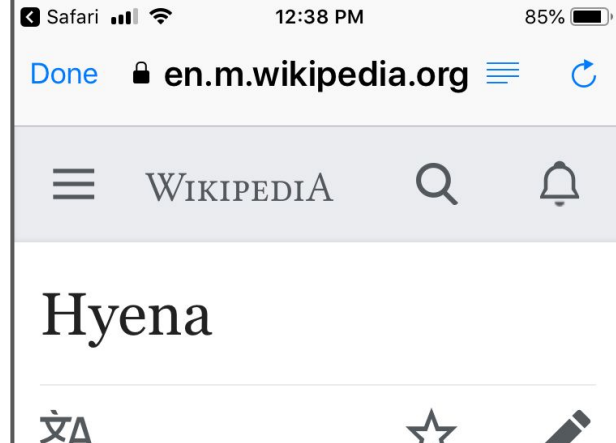
Hyena

Family of mammal

app

Hyenas or hyaenas (from Greek *ὑάινα* *hýaina*^[1]) are any **feliform carnivoran** mammals of the family **Hyaenidae** */har'ɛnɪdiː/*. With only four extant species (in three

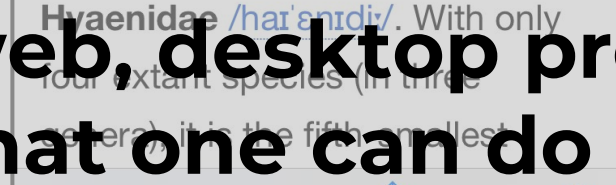
App, mobile web, desktop provide different views into what one can do on Wikipedia.



Hyena

This article is about the family of animals. For other uses, see **Hyena** (disambiguation).

Hyenas or hyaenas (from Greek *ὑάινα* *hýaina*^[1]) are any **feliform carnivoran** mammals of the family



Hyena

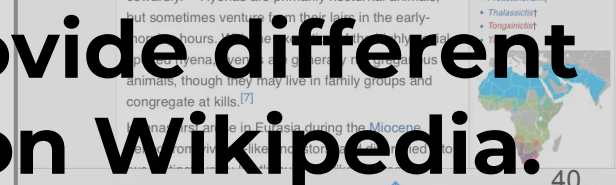
From Wikipedia, the free encyclopedia

This article is about the family of animals. For other uses, see Hyena (disambiguation).

Hyenas or **hyaenas** (from Greek *ὑάινα* *hýaina*^[1]) are any **feliform carnivoran** mammals of the family **Hyaenidae** */har'ɛnɪdiː/*. With only four extant species (in three genera), it is the fifth-smallest **biological family** in the **Carnivora**, and one of the smallest in the class **Mammalia**.^[2] Despite their low diversity, hyenas are unique and vital components of most **African** ecosystems.^[3]

Although **phylogenetically** they are closer to **felines** and **viverrids**, and belong to the feliform category, hyenas are behaviourally and morphologically similar to **canines** in several elements of **convergence**.^[3] Both hyenas and canines are non-arboreal, cursorial hunters that catch prey with their teeth rather than claws. Both eat food quickly and may store it, and the calloused feet with large, blunt, nonretractable claws are adapted for running and making sharp tracks.^[3] However, the hyenas' grooming, scent marking, defecating habits, mating and parental behaviour are consistent with the behaviour of other feliforms.^[4]

Spotted hyenas may kill as many as 95% of the animals they eat,^[5] while **striped hyenas** are largely **scavengers**.^[6] Generally, hyenas are known to drive off larger predators, like lions, from their kills, despite having a reputation in popular culture for being cowardly.^[6] Hyenas are primarily nocturnal animals, but sometimes venture from their lairs in the early-morning hours, especially when hunting. Spotted hyenas (as well as other hyena species) are generally gregarious animals, though they may live in family groups and congregate at kills.^[7]



Switched to desktop

Striped hyena
Species of mammal
[Save for later](#)



Pachycrocuta
Genus of mammals (fossil)



[Save for later](#)

Chasmaporthetes

[Save for later](#)

WIKIPEDIA

Content is available under CC BY-SA 3.0 unless otherwise noted.

[View article in browser](#)

app



en.m.wikipedia.org

Talk



Last edited 8 days ago by ...

genus of mammals (fossil)



Chasmaporthetes

genus of mammals (fossil)

mobile
web

WIKIPEDIA

Content is available under [CC BY-SA 3.0](#) unless otherwise noted.

[Terms of Use](#) • [Privacy](#) • [Desktop](#)

Done

en.wikipedia.org

conservation action plan" (PDF). IUCN/SSC Hyena Specialist Group. ISBN 2-8317-0442-1. Archived from the original (PDF) on May 6, 2013.

• Mills, Gus; Mills, Margie (2010). "Hyena Nights and Kalahari Days". Jacana Education. ISBN 1-77009-811-9.

• Pocock, R. I. (1941). "Fauna of British India: Mammals Volume 2". Taylor and Francis.

• Rosevear, Donovan Reginald (1974). "The carnivores of West Africa". London: Trustees of the British Museum (Natural History). ISBN 0565002238.

• Funk, Holdger (2010) *Hyaena: On the Naming and Localisation of an Enigmatic Animal*, GRIN Verlag, ISBN 3-540-69784-7

• Schipman, Anton (2003) *Hyenas: A Natural History*, Bloomsbury Publishing, ISBN 0-7127-0941-0

• Mills, M. G. L. (2003) *Kalahari Hyenas: Comparative Behavioral Ecology of Two Species*, The Blackburn Press

External links [edit] [edit source]

• IUCN Conservation Union Hyaenidae Specialist Group

Wikimedia Commons has media related to Hyaenidae (category)

Look up Hyaena in Wiktionary, the free dictionary.

Wikispecies has information related to Hyaenidae

Wikiquota has quotations related to Hyaena

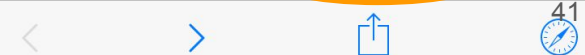
Extant Carnivora species	
Wikidata: Q42046	Wikispecies: Hyaenidae: ADW: Hyaenidae
EoL: 7672	Fossilworks: 41029
IRMNG: 104702	ISC: 107195
ITIS: 621756	MSW: 14000682
NCBI: 9676	
Authority control	NDL: 00562779

Categories (+): Hyaenas (-) (a) (l) (t) | Mammals of Africa (-) (a) (l) (t) | Mammals of Asia (-) (a) (l) (t) | Scavengers (-) (a) (l) (t) | Extinct Carnivora (category) (a) (l) (t) (t)

This page was last edited on 29 January 2019, at 20:28.

Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.

Privacy policy About Wikipedia Disclaimers Contact Wikipedia Developers Cookie statement Mobile view



Switching between the platforms, out of necessity or choice, is inconsistent and can be confusing.

Switched to desktop

Gadgets express workflows and guide contributors toward accomplishing something.

They could possibly serve as UX patterns*.

* Gadgets demonstrate well worn workflows, and the steps to accomplish them. They may be useful patterns for designing workflows on mobile. However, it is important to consider how appropriate for mobile those work flows are. For example, if they are long workflows with many steps that need to happen in close succession, perhaps they need to be broken up, or somehow changed, to be appropriate for, or easier on mobile (think about patrolling for vandalism with Twinkle, for example). It is also important to keep in mind, that some gadgets are created with specific goals in mind. (In the case of fully automated workflows, like Snuggle, for finding vandals, huggle for finding good faith editors to mentor.) Remember to be conscious of, and address any bias that defined workflows can proliferate.

Some gadgets:

Hotcat for adding categories

Twinkle for patrolling and tagging for clean up

Huggle for patrolling for vandalism (bot)

Snuggle for finding new good faith editors to mentor (bot)

STiki for reverting vandalism

AfC workflow

There are others...

There were some requests to optimize editing Wikipedia for low end smartphones.

Some people described their phone being the problem with performance and an issue for them being able to easily contribute to Wikipedia.

We should design with this large audience in mind.

How can we provide a faster and more efficient contribution experience for folks with low end smartphones?



**Which tasks and workflows
should be prioritized to
improve or provide on mobile?**

Contribution tasks

Contribution tasks assessed in 2018 survey

- Fixing typos
- Copy editing (fixing grammar and clarifying meaning)
- Updating article content with new information (line)
- Expanding content of existing articles 5k times a day (line 309)
- Adding references / citations (line 393 in taxonomy)
- Adding Wikipedia links (line 273)
- Adding media to articles (line
- Adding captions to media on articles
- Extending lists within articles
- Adding / editing wikidata content to articles
- Translating content from one language Wiki to another
- Creating new articles (AfC and directly creating a new article)

Contribution tasks: recommended priority

Priority 1	Priority 2	Priority 3
Fixing typos	Adding captions to media on articles	Adding / editing wikidata content to articles
Copy editing (fixing grammar and clarifying meaning)	Extending lists within articles	
Updating article content with new information	Translating content from one language Wiki to another	
Adding references / citations	Creating new articles (AfC and directly creating a new article)	
Adding Wikipedia links		
Adding media to articles		

Curation tasks

Curation tasks tested in 2018 survey

- Checking references for verifiability, and fixing references
- Patrolling, reviewing raw edit feeds looking vandalism
- Deleting, proposing deletion of articles
- Tagging articles for clean up
- Reverting edits
- Reviewing, approving draft articles
- Reorganizing articles (split, merge, re-name) - move
- Adding and/or editing categories
- Editing info boxes

Curation tasks prioritized for mobile

Priority 1	Priority 2	Priority 3
Checking references for verifiability, and fixing references	Patrolling, reviewing raw edit feeds looking vandalism	Reverting edits
Tagging articles for clean up	Deleting, proposing deletion of articles	Reviewing, approving draft articles
Reorganizing articles (split, merge, re-name) - move		Adding and/or editing categories
		Editing info boxes

Moderation tasks

Moderation

- Welcoming new contributors
- Updating user pages
- Mentoring, providing help for new contributors
- Reaching out to expand our community
- Discussing article content with other editors on Wikipedia
- Reviewing feeds of talk pages looking to help
- Helping moderate discussions on talk and user pages
- Reviewing, patrolling new user pages

Moderation tasks prioritized for mobile

Priority 1	Priority 2	Priority 3
Welcoming new contributors	Reviewing feeds of talk page edits looking to help	Mentoring, providing help to new contributors
Updating user page	Helping moderate discussions on talk / user pages	Reaching out to expand our community
Discussing article content with other contributors on Wikipedia		Reviewing, patrolling new user pages

How was priority
decided?

Deciding task and workflow priority

Editor Tasks Survey

Top 5 editing tasks

on any
platform
across new and
experienced
contributors

Expert Audit (contribution taxonomy)

**Skill level
required**
(score 5-25)

**Editor
usability**
(wikitext
versions/VE)
(16-19)

**Mobile
appropriate**
(score 5-25)

Frequency
on each wiki

**On which
wikis?**

User assessment (2018 survey of new and experienced contributors)

**Qualitative scale:
ease of use:**

- “Easy”
- “OK, I had to learn”
- “Hard”

**Qualitative
feedback**

**Priority for improving or
implementing on mobile**

Details about elements of prioritization

- Is it in the **top 5 basic editing tasks** from the 2015 editor task survey?
- **Contribution taxonomy:**
 - Criteria scores and team weighting from contribution taxonomy
 - Is it listed in the top 10 or top 31 prioritized tasks and workflows?
 - **Frequency** that this task or workflow is done on the 5 listed wikis (En, Fr, Ko, Cs, Hi)
 - Is it **across all 5 wikis**, or only done on one or two?
- **Feedback from 2018 survey** participants (easy or hard + comments)
- Is it **focused within the context of Wikipedia?** Or is it done elsewhere (Commons, Wikidata, for example)?
- If it is a **very complex workflow, the priority is lower** since it will take more work to implement on mobile. Higher priority was given to tasks that are easier to implement or improve right away.

Most frequent tasks

(according to editors)

Most frequent tasks

(according to 2015 editing tasks survey)

Most frequent contribution tasks (self report: “which of these tasks do you do most frequently?”)

1. Add / edit text (small typos and grammar)
2. Add / edit text (sentences and paragraphs)
3. Add a wikilink
4. Add / edit a citation
5. Format text

Most frequent tasks people do besides basic editing:

1. Reverting vandalism (new 1 / casual 16 / experienced 23)
2. Admin actions (casual 2 / exp 10)
3. Advanced image action (casual 3 / exp 4)
4. Template-related (casual 2 / exp 5)
5. Tagging/categories (casual 2 / exp 4)

Contribution taxonomy recommended tasks

Scoring and Weighting

Process	Technical	Community	Personal	Domain	Parallel	High-detail	Time	Steps	Precision	Team rating			~ # a day	Step	Tool	Code	100%	100%	98%	99%	99%	Process	Technical	Community	Personal	Domain	Parallel	High-detail	Time	Steps	Precision	Team rating		
										iOS	Andr	Web					EN	KO	CS	HI	FR											iOS	Andr	Web
													[2.] Add links from other places as appropriate.	— [manual edit and use of WhatLinksHere; repeatable ; ends]	E7	✓	✓	✓	✓	✓	3	3	2	2	3	1	2	2	1	3				
													[3.] Make further edits as appropriate (other workflow)	— [manual edits; switch to different workflow]	W1	✓	✓	✓	✓	✓	2	3	2	1	2	1	2	2	3	3	9.3	9.7	10.1	
													[1.] Follow wizard steps to "prove" you have no COI	Article creation wizard	R1	✓	✓	✓	✓	✓	2	1	1	1	3	1	1	2	3	2	7.0	7.4	7.2	
													2a. Create article in Draft space for review	— [manual edit to create a page via default/user's editor]	C2	✓	✗	✗	✓	✓	2	3	2	2	3	1	3	2	3	3	9.9	10.3	10.6	
													2b. Create article in User space for review/advice	— [manual edit to create a page via default/user's editor]	C2	✓	✗	✗	✓	✓	2	3	2	2	3	1	3	2	3	3	9.9	10.3	10.6	
													[3.] Comment on and fix up the article	— [manual edit; repeatable]	E7	✓	✗	✗	✓	✓	2	3	2	2	2	1	2	2	1	3	9.1	9.5	9.8	
													[4.] Respond to comments and improve the article	— [manual edit; repeatable]	E7	✓	✗	✗	✓	✓	2	3	2	2	2	1	2	2	1	3	9.1	9.5	9.8	
													5a. Accepts the article, moves to main namespace	— [manual edit and move done by the author (once autoconfirmed); ends]	M1	✓	✗	✗	✓	✓	2	2	2	3	2	1	2	2	1	2	7.2	7.6	7.5	
														— [manual edit and move done by another user (extended confirmed); ends]	M1	✓	✗	✗	✓	✓	2	2	2	3	2	1	2	2	1	2	7.2	7.6	7.5	
													5b. Declines the article, nominates for deletion	— [manual edit; switch to different workflow]	T2	✓	✗	✗	✓	✗	3	3	3	2	2	2	2	2	1	3	9.8	10.4	10.5	
													5c. Directly publishes the article by copy/pasting	— [manual cut-paste edit; ends; this is an anti-pattern]	M2	✗	✗	✗	✓	✓	3	3	4	4	3	2	1	2	2	1	3	9.7	10.3	10.3

Workflow scores

Weighted aggregate scores

Which Wikis have this workflow step?

Step / Tool scores

Weighted aggregate scores

Contribution taxonomy workflow scores

To decide on prioritization of tasks for the [Contribution taxonomy project](#), we looked at a combination of:

- The criteria scores and team weighting (above a 4.0 score for weighting)
- The number of times a workflow or step happens on various wikis
- How many of the 5 included wikis have the workflow
- Knowledge about the workflow
 - Do I need any special rights / or access to do this?
 - Do I need a special tool to take part here?
 - Does this only work if my wiki has this set up?

Mobile potential ability criteria

	Benchmark	Parallel activities (small screen issues)	Detail/high context (small screen issues)	Temporal length (continuous use issues)	Tied steps (continuous use issues)	Precision needed (touch screen issues)
		<i>Do I need to have many things open at once to do this?</i>	<i>Is there a lot of context, where I might need to repeatedly zoom out and in to understand it?</i>	<i>Do I have to do this all at once, or can I do a little and then come back?</i>	<i>Must I do lots of steps in succession, or is it one-and-done?</i>	<i>How important is very careful pixel-perfect / key sequence precision to the task?</i>
5	It's natural for me to do this on mobile	Account creation	Wikidata: Magnus's tools' system	enwiki: Nominating some spam for deletion	enwiki: Participating in a deletion discussion	Wikidata: Magnus's tools' voting buttons
4	Doing this on mobile works well for me	enwiki: Making a deletion decision	[Android] Wikidata description editing	enwiki: Creating a new category	enwiki: Speedy deletion close	Visual editing
3	This is something I'm OK to do on mobile	enwiki: Proposing to rename a page	Give input to a deletion discussion	Using the wikitext editor for basic content edits	Edit patrolling	Finding and editing discussion / talk pages
2	I'd be lost trying to do this on mobile	Commons: Taking part in a Freedom Of Panorama discussion	Editing references via wikitext	enwiki: Creating a new article	enwiki: Taking an article through the featured content process	Image cropping / editing
1	It's impossible for me to do this on mobile	Rewrite all references on the page	Restructure content between a set of articles	enwiki: Taking an article through the featured content process	Renaming a category and moving all articles within it	Editing a complex template

Current user difficulty criteria

	Benchmark	Process familiarity	Technical comfort	Community feeling	Personal social capital	Domain knowledge
		<i>How visible and clear is the process? What's the learning curve like?</i>	<i>Is much technical experience needed for me to be comfortable taking part?</i>	<i>How much understanding of the community and its values do I need to do this?</i>	<i>Do I need to have and spend my personal social capital to make this happen?</i>	<i>How much familiarity with the content's or policy's topic you I need to have to be able to participate?</i>
5	I don't need any experience to take part					
4	My very basic familiarity is helpful					
3	I'm happy I am quite familiar here; it helps me					
2	I'd be lost if I wasn't very experienced with this					
1	My expertise is crucial to making this work					

See taxonomy page on Mediawiki for details

Editors, and how they stack up against each other

<u>2003 wikitext editor</u>	16
<u>2006 wikitext editor</u>	16
<u>2010 wikitext editor</u>	16
<u>2017 wikitext editor</u>	18
<u>Visual editor</u>	19
<u>2013 mobile wikitext editor</u>	16
Android native app wikitext editor	16
iOS native app wikitext editor	16

Contribution tasks

detailed assessment

Contribution tasks

New Editors	Smartphone & App				Smartphone & mobile web				Smartphone switched to desktop				Laptop / Desktop				
	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	
Contribution																	
Fixing typos				20	11	8	1	55%	2				33	25	8	0	76%
Copy editing (fixing grammar, clarifying meaning)				16	7	7	2	44%	2				27	23	2	2	85%
Updating article content with new information				14	8	3	4	57%	1				34	23	5	6	68%
Expanding content of existing articles				12	7	2	3	58%	1				27	20	4	3	74%
Adding references / citations to articles				7	2	3	2	29%	1				19	9	7	3	47%
Adding Wikipedia links to articles				8	3	2	3	38%	0				23	17	6	0	74%
Adding captions to media in articles				8	2	4	2	25%	1				8	2	4	2	25%
Adding media to articles (photos, videos, images)				5	2	1	2	40%	0				5	2	1	2	40%
Extending lists within articles				6	3	2	1	50%	0				11	8	3		73%
Adding / editing Wikidata content on articles				8	2	3	3	25%	0				14	9	2	3	64%
Translating content from one language Wikipedia to another				7	3	2	2	43%	0				13	7	3	3	54%
Creating new articles				8	3	1	4	38%	1				14	6	4	4	43%
													100	20			20%

Experienced Editors	smartphone and app				smartphone and mobile web				smartphone switched to desktop site				laptop / desktop			
	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#
Contribution																
Fixing typos	23	9	2	68%	62	46	15	74%	23	16	5	70%	101	95	6	94%
Copy editing (fixing grammar, clarifying meaning)	14	5	0	74%	50	37	13	74%	17	14	2	82%	89	84	4	94%
Updating article content with new information	8	5	0	62%	33	25	8	76%	14	12	2	86%	96	86	8	90%
Expanding content of existing articles	4	3	1	50%	25	17	7	68%	11	7	4	64%	85	78	5	92%
Adding references / citations to articles	4	3	0	57%	24	12	10	50%	11	6	3	55%	87	53	27	61%
Adding Wikipedia links to articles	8	4	1	62%	32	21	9	66%	12	10	3	83%	86	77	9	90%
Adding captions to media in articles	2	2	1	40%	17	10	3	59%	7	4	2	57%	48	39	7	81%
Adding media to articles (photos, videos, images)				0%	20	10	5	50%	7	4	2	57%	60	45	12	75%
Extending lists within articles	2	3	0	40%	22	13	5	59%	10	6	2	60%	60	48	11	80%
Adding / editing Wikidata content on articles	4	3	0	57%	20	13	7	65%	11	8	2	73%	57	36	17	63%
Translating content from one language Wikipedia to another					12	6	2	50%	6	3	1	50%	41	25	11	61%
Creating new articles					20	10	7	50%	9	5	2	56%	73	54	14	74%

Task (If link, it is visualized)	CTax criteria score*	Survey assessment	Feedback from survey	Priority for mobile (1=top, 2=mid, 3=low)
Fixing typos Line: 309 - 318 (depends on editor used) EN:5k, KO=20 CS=150, HI=160, FR=?	M: 21 CU: 21 (iOS native app) - 24 (ve)	New: easy Exp: easy (across platforms)	New editors: * Had to figure out syntax and formatting * others delete their changes, they don't know why Experienced editors: * difficult navigation and selection, lots of scrolling * not aware can edit on app	1 basic to contribution, one of top 5 most frequent tasks (2015 survey), top 10 for CT (under "expand article directly"), good scores, easy in general
<u>Copy editing</u> (fixing grammar, clarifying meaning) Line: 393 - 396 (depends on editor used) EN:1-10k, KO=? CS=?, HI=?, FR=?	M: 22 CU: 21 (iOS native app) to 24 (ve)	New: hard Exp: easy (hard for new editors on mobile web, easy for new editors on dt)	New editors: * Had to figure out syntax and formatting * others delete their changes, they don't know why Experienced editors: * Navigation and selection: Hard to re arrange stuff, and copy paste on mobile	1 basic to contribution, one of top 5 most frequent tasks (2015 survey), top 10 for CT, room to make easier,
<u>Updating article content with new information</u> Line: 393-396 (depends on editor used) EN:1-10k, KO=? CS=?, HI=?, FR=?	M: 20-21 CU: 22	New: easy Exp: easy (across platforms)	New editors: * Had to learn syntax, was hard Experienced editors: * copy/ paste, remember syntax and formatting for references hard on mobile * Tables are hard to update correctly (laptop) * Request for "simple modification mode" like in FR	1 basic to contribution, one of top 5 most frequent tasks (2015 survey), top 10 for CT (under "expand article directly"), easy to do
<u>Expanding content of existing articles</u> Ct line: 309-318 (depends on editor used) EN:5k, KO=20 CS=150, HI=160, FR=?	M: 21 U: 22	New: easy Exp: OK on app Easy otherwise	New editors: * adding sections is hard, knowing syntax challenging Experienced editors: * Tables are hard to update correctly (laptop) * No auto correction (?) (smart phone on desktop site)	1 basic to contribution, one of top 5 most frequent tasks (2015 survey), top 10 for CT (under "expand article directly")

* **Contribution taxonomy score:** 25 is the highest score for either criteria set. Anything above 20 for either criteria is not super difficult to do, but this score also depends on the editor being used.

Task	Mobile criteria score	Survey score	Feedback from survey	Priority for mobile (1=top, 2=mid, 3=low)
Adding references/citations Line: 393 EN:10k, KO=? CS=?, HI=?, FR=?	M: 21 CU: 21	New: hard Exp: easy - OK on mobile web	New editors: * can't do it, need a guide, "fiddly code" Experienced editors: *challenging to remember syntax and formatting - easier with automation on dt * Requesting how to for people	1 basic to contribution, one of top 5 most frequent tasks, top 10 for CT (under "expand article directly")
Adding links Ct line: 273 EN:?, KO=? CS=?, HI=?, FR=? Part of create article from scratch: happens A LOT	M: 21 CU: 17	New: hard on mobile easy on desktop Exp: easy	New editors: * syntax is hard to learn/ remember, request for more automation or how to Experienced editors: * request preview before committing edit -sometimes linking wrong links. * navigation, selection (of page linking to), lots of scrolling difficult - request for find in page (mobile) * request syntax reminder	1 basic to contribution, one of top 5 most frequent tasks, top 10 for CT (under "expand article directly")
Adding captions to media Ct line: 357 En:5, KO=10, CS=?, Hi=<1, Fr=?	M: 21 CU: 22	New: hard (mobile web and desktop) Exp: hard on mobile, easy dt	New editors: * Request for how to, don't know how, or that it could be done Experienced editors: * didn't know it is possible to do this * don't know how * Navigating hard	2 could be easy to do on mobile, time constrained. Needs to be easier to discover. Is it in the realm of commons? top 10 for CT
Adding media to articles (WORKFLOW) Ct line: 358 En:300, KO=20, CS=?, Hi=<1, Fr=?	M: 21 CU: 22	New: hard mobile + dt Exp: OK mobile, Easy dt across platforms	New editors: * Commons platform hard, get an error now, copyright form (dt) is intimidating Experienced editors: * can't do (or didn't know could do) on app * Mobile web: trying to get correct size of image auto kicks to desktop site * not obvious that it can be done on moible, nor easy * request for how to	1 (Remember the selfie apocalypse.) Possibly easier via VE media selection because copyright already defined. Adding manually is hard even hard to learn on lap/desktop. top 10 for CT (under "expand article directly")

Task	Mobile criteria score	Survey score	Feedback from survey	Priority for mobile (1=top, 2=mid, 3=low)
Extending lists within articles Ct line: ?	M: 19 CU: 20	New: easy Exp: OK on app Easy otherwise	New editors: * request for how to Experienced editors: * navigation, selection, lots of scrolling difficult) * How to request (need quick guide to refer to for syntax and formatting)	2 Not a basic editing task, saw many of these edits in random selection of mobile edit s that were tagged. NOT top 30 for CT
Adding / editing Wikidata content on articles Ct line: ?	No score	New: hard Exp: OK on mobile web, easy otherwise	New editors: * don't know how * platform is different, challenging to get started Experienced editors: *adding statements doesn't work on mobile, unless on desktop site on mobile * too much moving from place to place, have to know too much detail (alias, structure, statement name), to do on mobile Hard to reach data from article	3 Not a basic task, hard to conceive of, would take work to build awareness and to create contextual awareness of both platforms. NOT top 20 for CT
Translating content from one Wikipedia to another Ct line: 284 - 285 En:30, KO=20, CS=10, Hi=2, Fr=260	M:15 CU: 18 (CT tool) M: 21 CU: 19	New: hard on mobile easy on dt Exp: OK on mobile web and phone switched, easy on desktop	New editors: * hard to learn - need how to (desktop) Experienced editors: * not obvious it is possible * better translation tools are available	2 Though it may take some effort to make it easier on mobile, it is an important tool for contributing diverse language content. Was not scored in top 30, but was added as important
Creating new articles Scratch: (line 263-274) En=2200, KO=50, CS=60, HI=30, FR=250 AfC:(line 275-283) En=150, Fr=? KO=?, CS=15, Hi=12	M:16- 19 CU:15-20	New: hard on mobile easy dt Exp: OK on mobile web easy on switched + dt	New editors: * request for how to * Don't know how, couldn't do it Experienced editors: * hard to get approved * lots of hoops to go through before publishing * not easy to know how	2. Manual creation happens 22000 times a day on EN wiki. It is complicated because of the amount of education necessary. AfC for mobile? Both are in top 20 for CT.

Curation tasks

detailed assessment

Curation tasks

New Editors	Smartphone & App				Smartphone & mobile web				Smartphone switched to desktop				Laptop / Desktop					
	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard		
Checking references for verifiability, and fixing references	3				8	3	3	2	38%	3				11	5	3	3	45%
Patrolling, reviewing raw edit feeds looking vandalism	2				5	2	3		40%	2				5	4	1		80%
Deleting / proposing deletion of articles	2				5	2	3		40%	1				5	4		1	80%
Tagging articles for clean up	2				4				0%	1				4				0%
Reverting edits	0				4				0%	0				5	4	1		80%
Reviewing, approving draft articles	1				4				0%	1				3				0%
Reorganizing articles (split, merge, re-name)	1				3				0%	1				3				0%
Adding and/or editing categories	1				3				0%	1				4				0%
Editing info boxes	0				5	1	4		20%	0				7	1	5	1	14%

Experienced Editors	smartphone and app				smartphone and mobile web				smartphone switched to desktop site				laptop / desktop						
	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard	#	easy	had to figure out	more hard			
Checking references for verifiability, and fixing references	7	4	2	1	57%	15	13	2	87%	11	10	1	91%	57	43	13	1	75%	
Patrolling, reviewing raw edit feeds looking vandalism	5	3	1	1	60%	14	11	2	79%	8	6	1	75%	47	36	11		77%	
Deleting / proposing deletion of articles	4				0%	7	5	2	71%	6	6		100%	35	25	8		71%	
Tagging articles for clean up	6	2	2	2	33%	9	6	3	67%	6	5	1	83%	36	27	9		75%	
Reverting edits	4				0%	17	12	2	3	71%	11	9	1	1	82%	53	44	8	83%
Reviewing, approving draft articles	2				0%	8	7	1		88%	7	6	1		86%	20	15	5	75%
Reorganizing articles (split, merge, re-name)	3				0%	7	5	2		71%	7	5	1	1	71%	21	19	9	90%
Adding and/or editing categories	5	2	2	1	40%	11	7	4		64%	8	6	2		75%	40	30	10	75%
Editing info boxes	4				0%	15	12	3		80%	7	6	1		86%	55	38	13	69%

easy

OK, had to learn

hard

Task	Mobile criteria score	Survey score	Feedback from survey	Priority for mobile (1=top, 2=mid, 3=low)
<p>Checking references for verifiability, and fixing references</p> <p>Ct line: 393 En:10k, KO=?, CS=?, Hi=<1, Fr=?</p>	<p>M: 21 CU: 21</p>	<p>New: hard (mobile and dt) Exp: easy (across platforms)</p>	<p>New editors: * hard to find content of reference list * hard to confirm if it worked (when fixed reference) * Need how to</p> <p>Experienced editors: * referencing is an enigma (dt) / need how to</p>	<p>1 very important for verifiability, should be easier to do.</p>
<p><u>Patrolling, reviewing raw edit feeds looking vandalism</u></p> <p>Ct line: 466 -478 En:40k, KO=60, CS=70, Hi=1, Fr=?</p>	<p>M: 19-24 (depending on tool used) CU: 17-22</p>	<p>New: hard on mobile, easy on dt Exp: easy (across platforms)</p>	<p>New editors: * don't know how</p> <p>Experienced editors: * easier with tool like Stiki</p>	<p>2 done 40k a day on En. Twinkle for mobile? Or... is it too hard to implement on mobile? Workflow is super complex and important!</p>
<p>Deleting / proposing deletion of articles</p> <p>("Patrol articles" in taxonomy) (Patrol new articles) En:5k, KO=?, CS=20, Hi=1, Fr=? Ct line: 488</p>	<p>M: 22 CU: 19</p>	<p>New: hard on mobile easy on dt Exp: OK on mobile web and phone switched, easy on dt</p>	<p>New editors: No comments</p> <p>Experienced editors: No comments</p>	<p>2 there are many deletion reasons and processes. Some are easier to solve than others. Could focus on the most easy and obvious deletion tasks first?</p>
<p><u>Tagging articles for clean up</u></p> <p>Hard to tell how many times. Lots of different tags and reasons to tag Ct line: 319 -340</p>	<p>M: 22 CU: 19-22</p>	<p>New: no scores Exp: easy (across platforms)</p>	<p>New editors: * n/a</p> <p>Experienced editors: * hard to remember syntax for templates, need easy access to reference (particularly hard on app) * have to leave page to find syntax, reduces focus * Twinkle made it easier on desktop.</p>	<p>1. Important for curation. Could make it easier by providing easy access syntax reference and templates.</p>

Task	Mobile criteria score	Survey score	Feedback from survey	Priority for mobile (1=top, 2=mid, 3=low)
<p>Reverting edits Ct line: 472-477 Part of patrolling looking for vandalism. Happens a lot.</p> <p>Nonsense speedy deletion is only on EN Notability speedy deletion happens on all wikis.</p>	M: 19 (for manual roll back) CU:	New: easy on dt, no scores for mobile Exp: Easy (across platforms, no score for app)	New editors: No comments Experienced editors: * harder to see diffs, so hard to focus to make correct decision on mobile * much harder on mobile than on dt. Have to do more manual work.	3 need to do a lot of back and forth, to get to the point of reverting. Hard to make the decision, not really time constrained. Not in top 30 for CT tasks.
<p>Reviewing, approving draft articles Ct line: 497-506 En:5k, KO=<1, CS=N/A, Hi=N/A, Fr=?</p>	M: 22 - 24 CU: 17-21	New: hard Exp: OK on mobile web, easy otherwise	New editors: No comments Experienced editors: *uses AFC helper. Doesn't understand how process works.	3 process is unclear. Need to educate about process or create flow to guide people through the process. Drafts not on all wikis.
<p>Reorganizing articles (split, merge, re-name) Move article directly Ct line: 371 En:2k, KO=20, CS=15, Hi=10, Fr=350</p>	M: 15-22 depend on task CU: 20	New: no scores Exp: easy (across platforms, no score for app)	New editors: No comments Experienced editors: * there are rules to figure out	1 need to communicate best practices and how. It is hard to find how. Directly moving pages is done pretty frequently on EN and FR wikis.

Task	Mobile criteria score	Survey score	Feedback from survey	Priority for mobile (1=top, 2=mid, 3=low)
<p>Adding and/or editing categories</p> <p>Ct line: 345 -349</p> <p>En=450, KO=20, CS=40, HI=12, Fr=160</p>	<p>M: 19-23</p> <p>CU: 14-18</p>	<p>New: hard on mobile Exp: OK on dt</p> <p>Exp: OK</p>	<p>New editors: No comments</p> <p>Experienced editors: * no categories on app, have to switch to mobile web. Easier there. * easier to switch to desktop on mobile and use hotcat</p>	<p>3. Could be easy on mobile, as it is time constrained. Perhaps hotcat for mobile? Should discuss with Commons team. Categories are not multi lingual, Commons / Wiki data have alternatives... Might be a strategic consideration to better support creating categories on mobile or not.</p>
<p>Editing info boxes</p> <p>?</p>	<p>No score</p>	<p>New: hard (mobile web and dt)</p> <p>Exp: easy</p>	<p>New editors: * how to / documentation request * don't know how to add more fields into a info box</p> <p>Experienced editors: (all comments from dt editors) *request for clear documentation of parameters for infoboxes * many kinds of info boxes, have to be sure of formatting - lots of checking *syntax for info boxes is hard to understand * request for help (not able to do it and quit)</p>	<p>3. Already hard on desktop. Might be heavy lift for mobile. Lot's of referencing needed for syntax and which is the proper infobox for the particular article.</p>

Moderation tasks

detailed assessment

Task	Mobile criteria score	Survey score	Feedback from survey	Priority for mobile (1=top, 2=mid, 3=low)
Welcoming new contributors Manual welcome line 400-402 EN:190, KO=1 CS=7, HI=0, FR=<1	M: 20 CU: 23	New: hard (mobile web) Exp: easy (phone switched and on laptop)	New editors: * <i>no comments</i> Experienced editors: * <i>no comments</i>	1 easy task to understand how to do. User talk pages are good places to know and use to connect with community.
Updating user page Ct line: 552 (not in scope for Contribution taxonomy, though it is listed)	No score	New: hard (mobile web) Exp: easy (on laptop, no data for other platforms)	New editors: * <i>no comments</i> Experienced editors: * <i>no comments</i>	1 A good place to know about, and use for communicating with community. Growth team notices many new editors in KO:wiki going to make user pages. Not on top 30 selected tasks, but still important.
Mentoring, providing help to new contributors Ct line: 417-433 (not in scope for Contribution taxonomy, though it is listed)	No score	New: hard (mobile web) Exp: easy (on laptop, no data for other platforms)	New editors: * <i>no comments</i> Experienced editors: * <i>no comments</i>	3 Skills are more people skills that are not solely solvable or teachable with software. Though having robustly usable and easy to discover talk pages (to connect new people to community) would certainly help this effort. Not in top 30, selected tasks.
Reaching out to expand our community Ct line: 463-464 (not in scope for Contribution taxonomy, though it is listed)	No score	New: hard (mobile web) Exp: easy (on laptop, no data for other platforms)	New editors: * <i>no comments</i> Experienced editors: * <i>no comments</i>	3. Not necessarily a software solution. Probably outside wiki in many cases. Though having robustly usable and easy to discover talk pages (to connect new people to community) would certainly help this effort. Not in top 30, selected tasks.

Task	Mobile criteria score	Survey score	Feedback from survey	Priority for mobile (1=top, 2=mid, 3=low)
<p>Discussing article content with other contributors on Wikipedia</p> <p>Ct line: 529-531 EN:300, KO=12 CS=?, HI=1, FR=?</p>	<p>M: 20-21 CU: 16 - 18</p>	<p>New: hard (mobile web) Exp: easy (mobile web, phone switched and laptop)</p>	<p>New editors: <i>* no comments</i></p> <p>Experienced editors: <i>* no comments</i></p>	<p>1 very important for knowing about and communicating with community. Talk pages need to be easier for new editors to successfully use. Toward the end of the top 30 list.</p>
<p>Reviewing feeds of talk page edits looking to help</p> <p>Ct line: 479-482 EN:200, KO=5 CS=0, HI=1, FR=?</p>	<p>M: 22-24 CU: 20-24</p>	<p>New: hard (mobile web) Exp: easy (on laptop, no data for other platforms)</p>	<p>New editors: <i>* no comments</i></p> <p>Experienced editors: <i>* no comments</i></p>	<p>2 Important for people to do for healthy discussion and content quality, and for people to be aware of and interact with community. Toward the end of the top 30 list.</p>
<p>Helping moderate discussions on talk / user pages</p> <p>Ct line: ?</p>	<p>20-21</p>	<p>New: hard (mobile web) Exp: easy (on laptop, no data for other platforms)</p>	<p>New editors: <i>* no comments</i></p> <p>Experienced editors: <i>* no comments</i></p>	<p>2 Important for people to do for healthy discussion and content quality. Not in top 30.</p>
<p>Reviewing, patrolling new user pages</p> <p>Ct line: 507-513 EN:1000, KO=1 CS=10, HI=3, FR=?</p>	<p>M: 22 CU: 15-23</p>	<p>New: hard (mobile web) Exp: easy (on laptop, no data for other platforms)</p>	<p>New editors: <i>* no comments</i></p> <p>Experienced editors: <i>* no comments</i></p>	<p>3 a bit removed from article content. If we focus on talk pages, it will help new people connect with community and get help. Perhaps less urgent to focus on user pages? Not in top 30.</p>

Why do people contribute on a mobile device, switched to the desktop site?

Experienced Editors: 48 responses

- Desktop site is easier, or more familiar (20)
- To do specific tasks or activities, or use specific tools (11)
- Wiki mobile platforms are hard (8)
- To find things that are hard to find or not on mobile (7)
- Prefer mobile devices over laptop (use laptop at work) (1)
- When internet is slow (1)

New Editors: 7 responses

- **Desktop machine is easier** (*they probably don't know about switching to desktop site, so described when they switch to using a laptop*) (5)
- For specific things (2) formatting, advanced toolbars, translation, **to check how my edit worked**



**Using more than
one mobile**


Why do some people use two mobile devices?

Experienced editors:

- (8) One for work and one for personal use
- (7) To have both mobile and a larger screen (they have a phone and tablet)
- (5) Depending on where I am, I will use one or the other
- (3) For wifi access
- (3) To juggle data plans
- (2) Use feature phone when worried about being spied on
- (1) For storage
- (1) One is more modern than the other
- (1) For storage

New Editors

- (3) One for work and one for personal use
- (2) to have both a mobile and a bigger screen
- (1) depending on where I am and what I am doing, I will use one or the other



Perceived performance

Perceived performance of each platform

Basically, the respondents think performance is OK, and that any issues they have are because of their access to the internet, or the devices they use.

A few folks mentioned that they thought VE slowed things.

For specifics about each platform see p. 122 in appendix

Analysis: comments about performance

Participants were asked: “If you want to let us know anything more specific about performance (speed) of the device and platform(s) you use to edit wikipedia, let us know here:”

New Editors

- (2) Performance issues are on my end (my access to internet or device)
- “It takes a really long time to load the editor sometimes and if I accidentally clicked on the edit button I have to wait for it to load before I can click on read (Researcher note: don’t know which editor they are using - but they use laptop all the time to edit, mostly only read on mobile)”
- The rest of comments were not related to performance, and added to larger qual analysis.

Experienced Editors (See exact comments in speaker notes)

- (5) Most comments were about respondents’ systems, and them saying that it is their device, or access to the internet that is the performance issue.
- (2) visual editor slows things down
- (1) specifically about app and keyboards
- (1) a possible bug having to do with monobook and screen resolution
- (1) considering performance is an issue in EN, since Fr is faster for them

Appendix



How we learned why people edit on mobile or not

In 2015, we asked directly...

“Do you contribute to Wikimedia projects on your mobile device?”

- Yes: 36 (we asked: “why do you edit wiki on mobile?”)
- No 24 (we asked: “Why don’t you edit wiki on mobile?”)

“Why do you edit wikipedia on mobile devices?” (36 respondents)

- **On the go wanted/needed to do something fast: (24)**
 - Was on the move, traveling or outside (not near a pc) (12)
 - saw something and wanted to do something right away (4),
 - Immediate action was required, and not near a pc (4)
 - Because they were doing quick edits on the move (4)
- I don't have a computer (5)
- Because it is a cleaner simpler experience (3)
- Random Others (5) (see text in speaker notes)

“Why don't you edit wikipedia on mobile devices?”

- Just don't like it or haven't tried (10)
- Hardware / keyboard too small (7)
- Missing or undiscovered features (5) (see text in speaker notes)
- Wikimarkup hard on mobile (2)
- My mobile device isn't quality enough to contribute (2)

We asked in the 2018 mobile contribution survey

(In a different way)

We surveyed contributors who use:

- mobile only
- lap/desktop only
- both mobile and desktop

In a series of questions, we were able to discover why people edit on mobile devices versus lap/desktops.

New and experienced editors are using the devices that are most comfortable and convenient.

- Asked mobile only editors “why only mobile?”
 - Mobile is easier for them (12 new / 13 experienced)
 - They are on the move, mobile is convenient for context (8 new / 8 experienced)
 - Some don’t have access to lap/desktops. (7 new and 8 experienced)
- Asked lap/desktop only editors “why only lap/desktop?”
 - Prefer larger keyboards/screens vs small ones on mobile (17 new / 20 experienced)
 - some haven’t tried editing on mobile devices (8 new / 14 experienced)
 - Some can’t find what they need for editing on mobile (3 new / 3 experienced)
 - Some don’t have mobile devices (2 new / 3 experienced)

Mixed device editors have reasons for choosing when to use their mobile and when to use their lap/desktop:

- Mixed device editors choose mobile:
 - When they are on the move (4 new / 25 experienced)
 - Doing simpler, less complicated kinds of contribution (2 new / 19 experienced)
- Mixed device editors choose lap/desktops:
 - To do more complex contribution, be precise, or accurate (7 new / 19 experienced)
 - To get to things they can't find or access on mobile that are in known places and have familiar workflows on desktop. (5 new / 17 experienced)

Detailed findings about editing on mobile vs. lap/desktops

Why do people use only mobile to edit?

New: 31/ 77 40% of respondents

- A mobile device is easier for me than a laptop - (12)
- I am on the move a lot, and mobile is best for me (8)
- I don't have access to a laptop (7)
- Other reason (4) (easier connecting to internet on mobile device, hassle of turning on loading, and signing into a laptop)

Experienced: 30/147 20% of respondents

- A mobile device is easier for me than a laptop - (13)
- I am on the move a lot, and mobile is best for me (8)
- I don't have access to a laptop (8)
- Other reason (1) I do not have mouse connected to the desktop. It is awkward using keyboard as there is no capability to access some edit buttons using it.

Why do people use only a laptop to edit?

New editors: 27/77 only use a laptop 35% of respondents

- Keyboard or screen is too small on mobile devices (17)
- No specific reason, just haven't tried editing on mobile (8)
- The functionality I need to contribute is not on a mobile device (3)
- I don't have a mobile device (2)
- Other (4) (am on my laptop all the time, no need for mobile, I use two monitors, I like to check and double check and handling several tabs is easier on laptop)

Experienced: 30/140 responses 21% of respondents

- Keyboard or screen is too small on a mobile device (20)
- No specific reason, just haven't tried editing on mobile (14)
- I don't have a mobile device (3)
- The functionality I need to contribute is not on a mobile device (2)
- Other (3) (hard to multi task and do inline citations and expansions, I edit wikitext directly, am on laptop all the time)

For those who use both laptops and mobile, when and why do they use each?

New editors: (18 comments)

- Mobile when
 - (4) On the go or not near a computer
 - (3) mobile is more convenient
 - (2) to do less complicated stuff
- Depends on context
 - (2) Doesn't matter to me, it is just the one I am using at the time I want to edit
 - (1) use feature phone at home and laptop at work space
 - Depends on internet access
- Laptop when
 - (7) to do more complex, precise or accurate stuff
 - (5) for easier access to stuff on wiki
 - (1) in one place

For those who use both laptops and mobile, when and why do they use each?

Experienced editors: (78 comments)

- Mobile when
 - (25) On the go or not near a computer
 - (19) To do simple, less complicated stuff
- Depends on context
 - (12) Depends on where I am and my physical comfort
 - (7) Depends on me having access (to internet or functional enough devices)
 - (2) Depends on performance - speed
 - (1) Whatever I am using at the time
- Laptop when
 - (19) Need to do more complex stuff, or be precise, accurate productive, or upload big things
 - (17) Because mobile lacks things and can be painful. Laptop is easier

Another framework for assessing ease of use of tasks

Contributing content

Contributing content

Smartphone & app

New Editors
Experienced Editors

<p>Adding media to articles</p> <p>Adding wikipedia links</p> <p>Adding references to articles</p>	<p>Adding wikidata content to articles (?)</p>		<p>Adding captions to media in articles</p>
<p>Updating article content new info</p> <p>Copy editing</p> <p>Fixing typos</p>		<p>Expanding content of existing articles</p>	<p>Extending lists in articles</p> <p>+ 20</p> <p>- 20</p>

Contribution taxonomy score

Content contribution

Smartphone & mobile web

New Editors
Experienced Editors

<p>Adding wikipedia links</p> <p>Adding captions to media in articles</p>	<p>Adding wikidata content to articles (?)</p>	<p>Adding media to articles</p>	<p>Adding references to articles</p>	<p>Adding captions to media in articles</p> <p>Adding media to articles</p> <p>Adding wikipedia links</p> <p>Adding references to articles</p>	<p>+ 20</p>
<p>Updating article content new info</p> <p>Updating article content new info</p> <p>Expanding content of existing articles</p> <p>Expanding content of existing articles</p> <p>Extending lists in articles</p>	<p>Fixing typos</p> <p>Fixing typos</p> <p>Copy editing</p>	<p>Translating content</p>	<p>Creating new articles</p>	<p>Extending lists in articles</p> <p>Copy editing</p> <p>Translating content</p> <p>Creating new articles</p>	<p>- 20</p>

Contribution taxonomy score

Contributing content

Smartphone & switched to desktop site

New Editors
Experienced Editors

Contributing content		Smartphone & switched to desktop site	New Editors	Experienced Editors
<p>Adding wikipedia links</p> <p>Adding captions to media in articles</p>	<p>Adding media to articles</p>			
<p>Expanding content of existing articles</p> <p>Extending lists in articles</p>	<p>Adding references to articles</p> <p>Adding wikidata content to articles (?)</p> <p>Updating article content - new info</p> <p>Fixing typos</p> <p>Copy editing</p> <p>Creating new articles</p>	<p>Translating content</p>	<p>+ 20</p> <p>- 20</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Contribution taxonomy score</p>

Contributing content

Laptop desktop

New Editors
Experienced Editors

Laptop desktop				Contribution taxonomy score
<p>Adding wikipedia links Adding wikipedia links</p> <p>Adding captions to media in articles Adding media to articles</p> <p>Adding wikidata content to articles (?)</p> <p>Adding wikidata content to articles (?)</p> <p>Expanding content of existing articles Expanding content of existing articles</p> <p>Extending lists in articles</p> <p>Extending lists in articles</p>	<p>Adding references to articles</p> <p>Adding media to articles</p> <p>Updating article content new info</p> <p>Updating article content new info</p> <p>Fixing typos</p> <p>Fixing typos</p> <p>Copy editing</p> <p>Copy editing</p> <p>Creating new articles</p>		<p>Adding references to articles</p> <p>Adding media to articles</p> <p>Adding captions to media in articles</p> <p>+ 20</p> <p>- 20</p> <p>Creating new articles</p>	

Curating content

Curating content

Smartphone & app

New Editors
Experienced Editors

<p>Checking references for verifiability, and fixing references</p>	<p>Patrolling, reviewing feeds vandalism</p>	<p>Reverting edits</p>	<p>Tagging articles for clean up</p>	<p>Adding and/or editing categories</p>
			<p>+ 20</p>	<p>- 20</p>

Contribution taxonomy score

Curating contribution

Smartphone & mobile web

New Editors
Experienced Editors

Smartphone & mobile web			New Editors			Experienced Editors		
<p>Checking references for verifiability, and fixing references</p> <p>Tagging articles for clean up</p> <p>Deleting / proposing deletion of articles</p>	<p>Patrolling, reviewing feeds vandalism</p> <p>Reverting edits</p> <p>Reorganizing articles (split, merge, re-name)</p>	<p>Reviewing, approving draft articles</p> <p>Adding and/or editing categories</p> <p>Editing info boxes</p>						
						<p>Patrolling, reviewing feeds vandalism</p> <p>Deleting / proposing deletion of articles</p>	<p>Checking references for verifiability, and fixing references</p> <p>Editing info boxes</p>	<p>+ 20</p> <p>- 20</p>

Contribution taxonomy score

Curating content

Smartphone & switched to desktop site

New Editors
Experienced Editors

Checking references for verifiability, and fixing references	Patrolling, reviewing feeds vandalism	Reviewing, approving draft articles	
Tagging articles for clean up	Reverting edits	Adding and/or editing categories	
Deleting / proposing deletion of articles	Reorganizing articles (split, merge, re-name)	Editing info boxes	
			+ 20
			- 20

Contribution taxonomy score

Curating content

Laptop desktop

New Editors
Experienced Editors

<p>Checking references for verifiability, and fixing references</p> <p>Tagging articles for clean up</p> <p>Tagging articles for clean up</p> <p>Deleting / proposing deletion of articles</p> <p>Patrolling, reviewing feeds vandalism</p> <p>Reverting edits</p> <p>Reviewing, approving draft articles</p> <p>Reverting edits</p> <p>Reorganizing articles (split, merge, re-name)</p>	<p>Patrolling, reviewing feeds vandalism</p> <p>Reviewing, approving draft articles</p> <p>Adding and/or editing categories</p> <p>Editing info boxes</p>	<p>Checking references for verifiability, and fixing references</p> <p>Editing info boxes</p> <p>+ 20</p>
		<p>- 20</p>

Contribution taxonomy score

Moderating

(not enough data about moderating)

Perceived performance of each platform

(details)

Perceived performance of **smartphone & app**

Fast, I don't think about it! / **It's OK**, (sometimes slow) / **Often slow**, but no data loss / **Slow**, I often lose data and have to start over

Look in presenter notes for written in details from participants (bold on numbers indicates there are comments)

- New Editors
 - Fast 5/10
 - **OK 15/0**
 - Often slow 0
 - Slow 0
- Experienced Editors
 - **Fast 16/37** (see comments in speaker notes)
 - OK 14/37 (see comments in speaker notes)
 - Often slow 4/37
 - Slow 3/37

Perceived performance **smartphone & mobile site**

Fast, I don't think about it! / **It's OK**, (sometimes slow) / **Often slow**, but no data loss / **Slow**, I often lose data and have to start over

Look in presenter notes for written in details from participants (bold on numbers indicates there are comments)

- New Editors
 - Fast 12/28
 - **OK 15/28** (see comment in speaker notes)
 - Often slow 1/28
- Experienced Editors
 - **Fast 34/77**
 - **OK 34/77**
 - Often slow 5/77 (see comments in speaker notes)
 - Slow 4/77

Perceived performance: **smartphone desktop site**

Fast, I don't think about it! / **It's OK**, (sometimes slow) / **Often slow**, but no data loss / **Slow**, I often lose data and have to start over

Look in presenter notes for written in details from participants (bold on numbers indicates there are comments)

- New Editors
 - Fast 4/16
 - **OK 10/16**
 - Often slow 2/16
 - Slow 0
- Experienced Editors
 - **Fast 17/41** (see comments in speaker notes)
 - **OK 16/41** (see comments in speaker notes)
 - Often slow 7/41
 - Slow 0

Perceived performance: **tablet & app**

Fast, I don't think about it! / **It's OK**, (sometimes slow) / **Often slow**, but no data loss / **Slow**, I often lose data and have to start over

Look in presenter notes for written in details from participants (bold on numbers indicates there are comments)

- New Editors
 - Fast 1/4
 - **OK 3/4**
 - Often slow 0
 - Slow 0
- Experienced Editors
 - **Fast 5/9**
 - OK 4/9
 - Often 0
 - Slow 0

Perceived performance: **tablet & mobile web**

Fast, I don't think about it! / **It's OK**, (sometimes slow) / **Often slow**, but no data loss / **Slow**, I often lose data and have to start over

Look in presenter notes for written in details from participants (bold on numbers indicates there are comments)

- New Editors
 - Fast 2/4
 - OK 2/4
 - Often slow 0
 - Slow 0
- Experienced Editors
 - **Fast 13/29**
 - **OK 13/29**
 - Often slow 2/29
 - Slow 1/29