

## Technology for growth

### The future of mobile editing

WIKIMANIA STOCKHOLM

## Why mobile?



### **Traffic has shifted**

### In December 2017, **mobile** pageviews **overtook desktop** pageviews

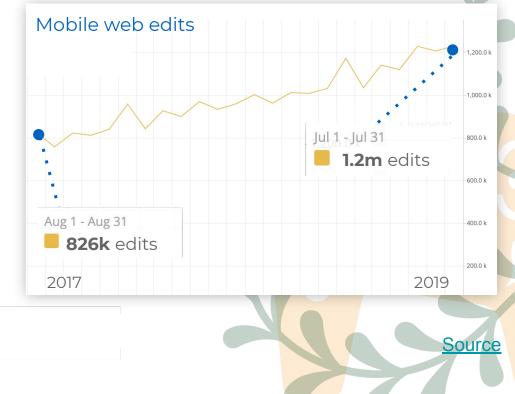


## Mobile editing is growing

During 2018, of the top 20 wikis:

- 10 had more than 10% of edits coming from mobile
- 2 have more than 20%

For **some** of these **wikis**, **mobile editing** has **increased** by more than **20%** since last year.



### Preferences and access

For a growing number of people, mobile is their preferred or only device for contributing.

This is crucial to community growth: we need to meet contributors where they are and where they prefer to be



## But... mobile not optimised for editing

- Important editing **functionality not available** or **hidden**
- Special pages were broken
- Core editing features were unusable
- Editing was **not accessible** to **newcomers**



### Key questions

- What needs to be considered before mobile VE is the first editor newcomers see?
- How do we build for contributors with different levels of experience?

# Etherpad w.wiki/7BG

### **Two approaches**

1) Make common editing workflows simpler on mobile

2) Expand the functionality to more closely resemble the desktop version of the site

### Two approaches

1) Make common editing workflows simpler on mobile

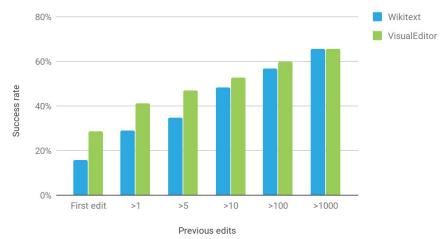
2) Expand the functionality to more closely resemble the desktop version of the site

## Why visual editing?

"I find that VE has **cut** my **Editathon training time** in **half**: you don't have to explain, and reinforce the skills of adding things like references or bolding."

"As a volunteer in Ecuador, I **only recommend** using **VE** to the **newbies** that attend our events. It's just inconceivable to me to even try to train people to learn code in 2018."

"In the last few years, I've **always recommended new editors** to immediately **turn on** the **VE** in their preferences"







## Mobile wikitext typing race

## Open a blank document/email on your phone...



### [[Cats & dogs|rain]] {{cn}}



VisualEditor was built with mobile support in mind

- Uses ContentEditable edit surface (unlike Google Docs)
- Avoids desktop-only interactions, such as mouse hover or keyboard arrows
- Flexible UI architecture

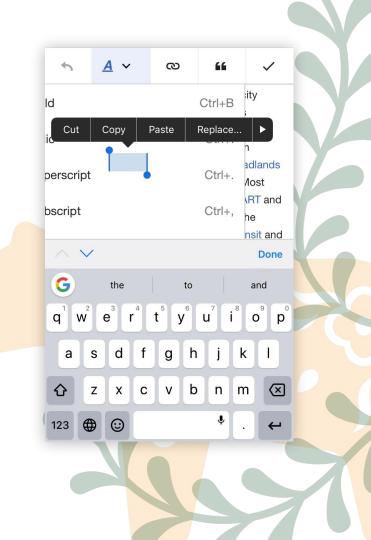


## The end



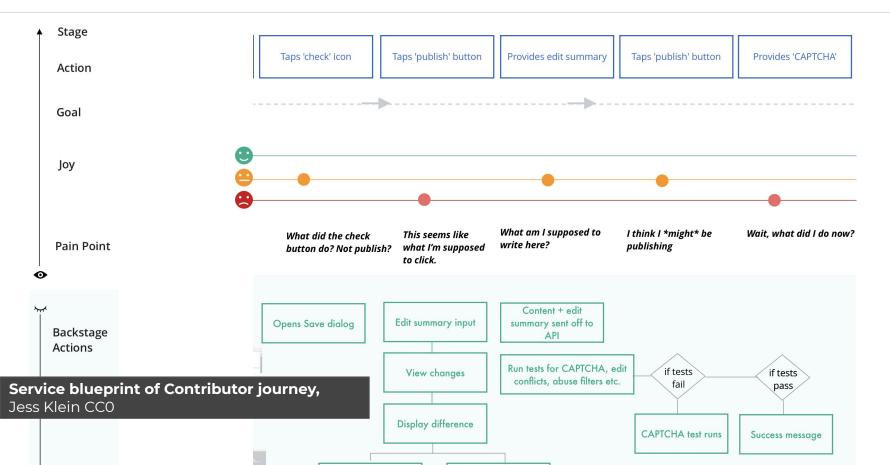
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## The end





### Listening, watching, and testing

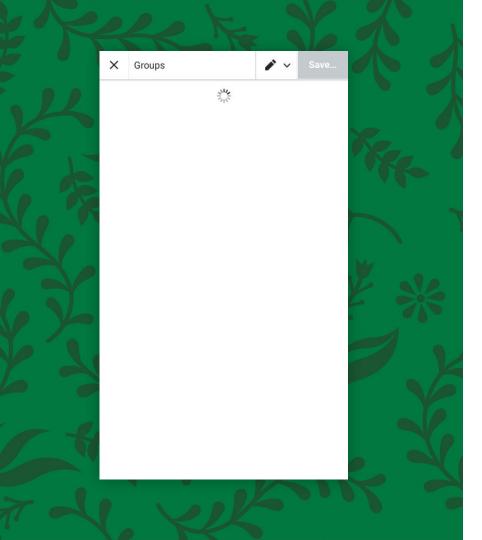




### **Design principles**

- 1. Do one thing at a time
- 2. Set the stage
- 3. Reduce stimulation
- 4. Work efficiently

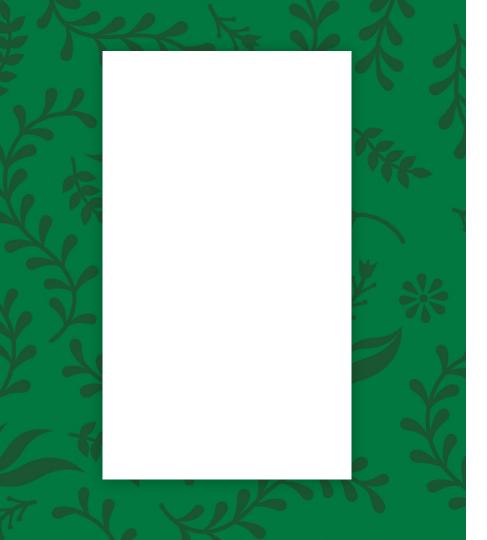




### **Problem:**

#### The editor feels slow to load





### Solution

## A smoother transition between reading and editing.



#### X Stockholm

*\**~

Stockholm has hosted the Stockholm Open, an ATP World Tour 250 series professional tennis tournament annually since 1969. Each year since 1995, the tournament has been hosted at the Kungliga tennishallen.<sup>[78]</sup>

#### Cuisine

There are over 1000 restaurants in Stockholm.<sup>[79]</sup> As of 2019 Stockholm boasts a total of ten Michelin star restaurants, two with two stars and one with three stars.

#### Yearly events



Stockholm Marathon, near Kungsträdgården in 2008

### Problem

#### It's hard to find what you want to edit.



Stockholm

1×

Publish

#### Cuisine

X

There are over 1000 restaurants in Stockholm. <sup>[70]</sup> As of 2019 Stockholm boasts a total of ten Michelin star restaurants, two with two stars and one with three stars.



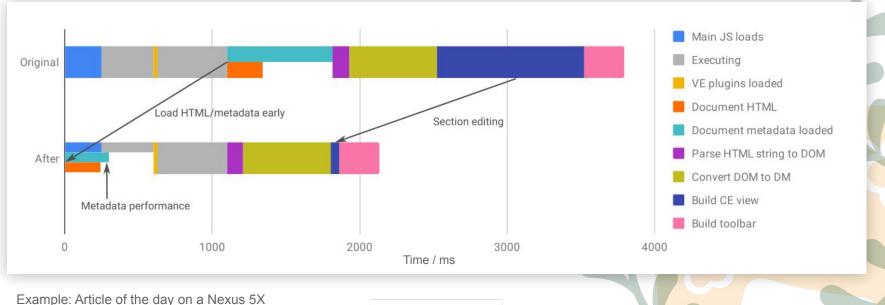
### Solution

### Remove all distracting text to allow for editing of this section



## Performance

#### ~40% faster in some cases





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All Muni lines run inside San Francisco city limits, with the exception of several lines serving locations in the northern part of neighboring Daly City, and the 76X Marin Headlands Express line to the Marin Headlands

Done

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### Problem

#### The editor feels cramped.



#### 

especially on less-often-served lines and older (prebattery backup) trolleybus lines, are a system-wide problem. Muni has had some difficulty meeting a stated goal of 85% voter-demanded on-time service. [5] ① created separate ref si... [6]

All Muni lines run inside San Francisco city limits, with the exception of several lines serving locations in the northern part of neighboring Daly City, and the 76X Marin Headlands Express line to the Marin Headlands area on weekends and major holidays. Most intercity connections are provided by BART and Caltrain heavy rail, AC Transit buses at the Transbay Terminal, and Golden Gate Transit and SamTrans downtown.<sup>[Citation needed]</sup>

Bus and car stops throughout the city vary from Chink

Label Marin Headlands

#### Link



#### Marin Headlands

peninsula in southern Marin County, California

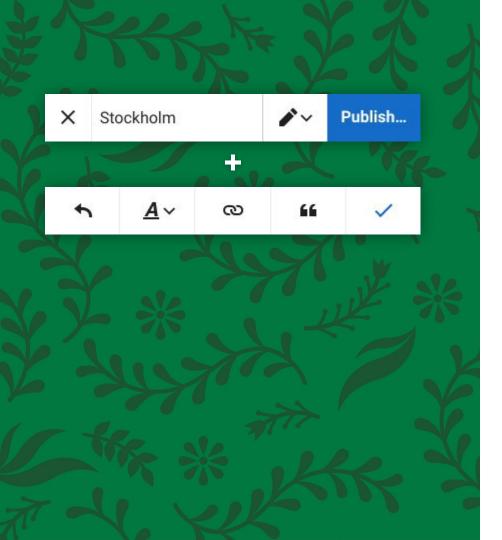
Remove link

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### Solution

### Create more space by changing how and where edit actions are shown.

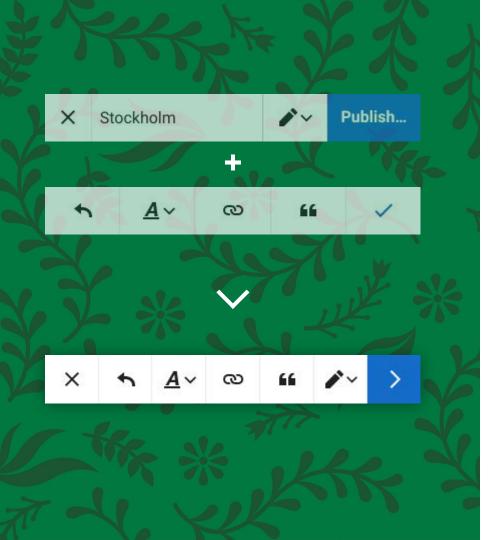




### Problem

#### Editors can't find the tools they need.





### Solution

#### A single toolbar with all tools visible.



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\* Desktop section editing written by not yet enabled (T221908), arrows show potential behaviour

Switches seamlessly with changes

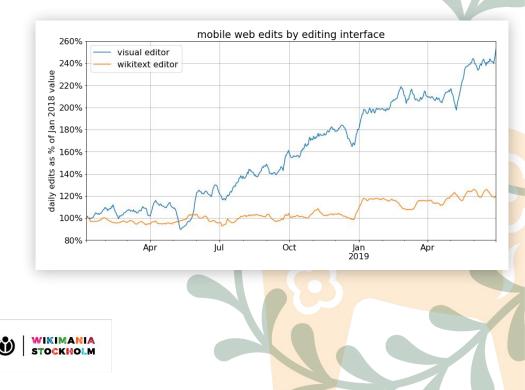
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\* Desktop section editing written by not yet enabled (T221908), arrows show potential behaviour

## Results

- **78%** increase in edit completion rate
- 95% increase in number of edits
- 17% reduction in revert rate
- Strong positive responses in user testing
- 3% edit completion increase when we A/B tested a single intervention, section editing



## Where next?

STOCKHOLM CC by SA 4.0, Thalia Chan

**()** 

## **Visual first** on mobile for new users

• A/B test in progress

WIKIMANIA

 Preferred editor remembered for existing users

CC by SA 4.0, Ed Sanders

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Wikimania is the official annual conference of the Wikimania is the official annual conference of the Wikimedia Foundation. Topics of presentations and discussions include Wikimedia projects such as Wikipedia, other wikis, open-source software, free knowledge and free content, and social and technical aspects related to these topics.

Since 2011, the winner of the Wikimedian of the Year award has been announced at Wikimania.

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### **Two approaches**

 Make common editing workflows simpler on mobile

2) Expand the functionality to more closely resemble the desktop version of the site

## Advanced mode on mobile demo

### Background

In the past, **editing on mobile was extremely limited**, special pages were unavailable and a lot of editors had to resort to using the desktop version of the site on their phones

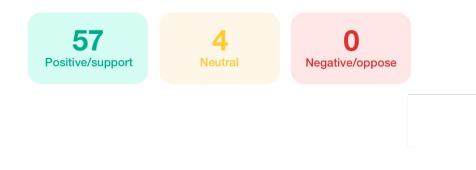
## What is Advanced Mode?

Advanced mode is a feature set that **adds** contributor features to the mobile web website.

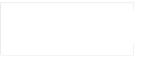
Advanced mode **expands the navigation and adds access to special pages** to more closely resemble the desktop version of the site.

## **Our process**

- 1. Interviewed editors at the hackathon and Wikimania
- 2. Collected and prioritized a list of missing features
- 3. Worked on adapting them to mobile in an easy and quick way
- 4. Created prototype and gathered feedback from more than 60 editors



### Features



### Article page

#### Current

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**Pluto** (minor planet designation: **134340 Pluto**) is a dwarf planet in the Kuiper belt, a ring of bodies beyond Neptune. It was the first Kuiper belt object to be discovered and is the largest known plutoid (or *ice dwarf*).



Advanced mode

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### History

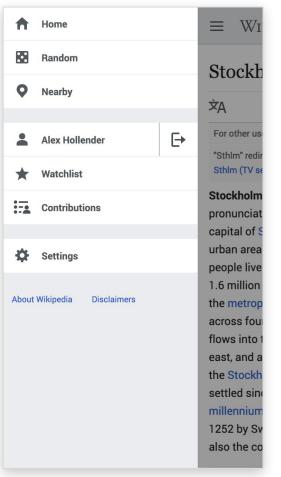
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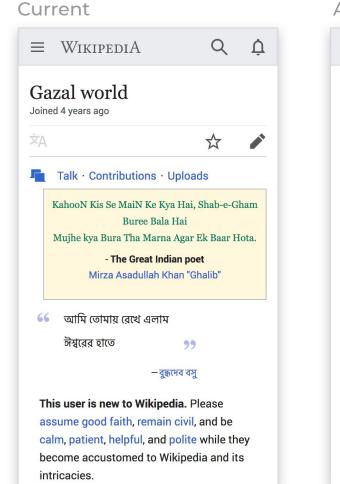
### User menu

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capital of Sweden and the most populous				
urban area in the Nordic countries; <sup>[a]</sup> 965,232				
people live in the municipality, <sup>[9]</sup> approximately				
1.6 million in the urban area, <sup>[5]</sup> and 2.4 million in				
the metropolitan area. <sup>[10]</sup> The city stretches				
across fourteen islands where Lake Mälaren				
flows into the Baltic Sea. Outside the city to the				
east, and along the coast, is the island chain of				
the Stockholm archipelago. The area has been				
settled since the Stone Age, in the 6th				
millennium BC, and was founded as a city in				
1252 by Swedish statesman Birger Jarl. It is				
also the county seat of Stockholm County				

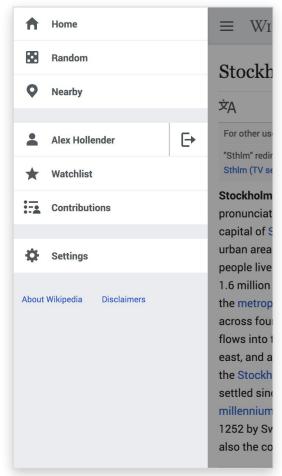
### User page



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### Main menu

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### Recent changes

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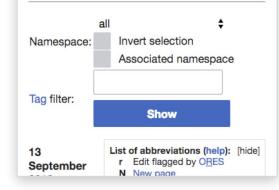
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WikipediA Q Q

#### **Recent changes**

This is a list of recent changes to Wikipedia.

Recent changes options Show last **50** | 100 | 250 | 500 changes in last 1 | 3 | **7** | 14 | 30 days Hide registered users | Hide unregistered users | Hide my edits | Show bots | Hide minor edits | Show page categorization | Show Wikidata | Hide probably good edits Show new changes starting from 22:50, 13 September 2018



#### Advanced mode

0 WIKIPEDIA Ĺ  $\equiv$ Q **Recent changes** This is a list of recent changes to Wikipedia. Other review tools ~ Saved filters V Hide Active filters Human (not bot) X **Filters** Namespaces Tags 🔁 50 changes, 7 days 🗸 Live updates View new changes since 14:21, 16 August 2019 16 August 2019 (diff | hist) List of T.U.F.F. Puppy episodes ; 14:21 -8 2602:306:cebf:49a0:75ef:99c0:81b3:c50b (talk) (diff | hist) Talk:Touch the Sky (Kanye West song) ; 14:21 -6.887 Another Believer (talk | contribs)

## Watchlist

#### \*coming soon

#### Current

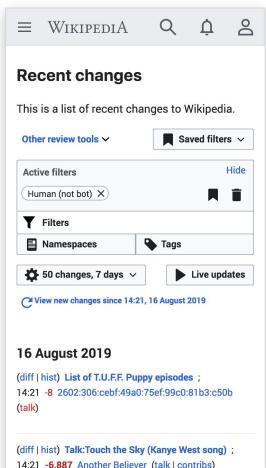
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### Demo: Advanced mode



## Deployments

# Started with wikis with large mobile editing rates, where smaller changes would be **useful immediately:**

Stage 1: basic functionality

Spanish Wikipedia

Arabic Wikipedia

Indonesian Wikipedia

**Stage 2: medium functionality** Japanese Wikipedia Italian Wikipedia Persian Wikipedia Thai Wikipedia Outreach Stage 3: full functionality

All other Wikis

Outreach

Further data analysis and improvements

## **Metrics and feedback**

- Overwhelmingly positive feedback on prototype
- Retention is currently at 81% (our target was 60%)
- Now that we're deployed everywhere, we will be looking at:
  - Feature retention on all wikis for target audience
  - Increase in moderation actions on mobile (undo, rollback, blocking, unblocking, etc)
  - Increase of pageviews to special pages on mobile



## After Advanced Mode

- What AMC functionality should we move to all logged-in users?
- How does this work inform and feed into upcoming changes to the desktop experience?



## **Discussion prompts:**

- Which features from advanced mode would benefit all logged-in users?
- How can we bring our learnings back to desktop?
- What needs to be considered before mobile VE is the first editor newcomers see?
- How do we build for contributors with different levels of experience?





### **Attribution**

Text and images from screenshots of the following pages:

- <u>https://en.wikipedia.org/wiki/Pluto</u>
- https://en.wikipedia.org/wiki/Fran%C3%A7oise Hardy
- <u>https://en.wikipedia.org/wiki/Stockholm</u>
- <u>https://en.wikipedia.org/wiki/User:Gazal\_world</u>

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