Mobile Page Issues
Research

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Research Plan
Research Questions

We will be conducting user interviews as well as looking at quantitative usage data to try and develop an understanding of two main questions:

Q1 – Does the new treatment for page issue notices increase the awareness among readers of page issues?

<table>
<thead>
<tr>
<th>Qualitative research</th>
<th>Quantitative research</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Do readers notice the new page issue treatment more than the current treatment?</td>
<td>- Is there an increase in click-through based on the new issue treatments (from the article page to the issues modal)?</td>
</tr>
<tr>
<td>- Do readers notice version B (with titles) of the new treatment more than version A (without titles)?</td>
<td>- Is there any correlation between severity of the issue and click-through rate?</td>
</tr>
<tr>
<td>- Do readers notice page issues notifications located after the lead paragraph more than if they are located at the top of the page? (not yet tested)</td>
<td>- (A/B test candidate) how does the inclusion of a semantic title (e.g. &quot;Content Issue&quot;, &quot;Style Issue&quot;, &quot;Severe Issue&quot;) and/or a timestamp affect the click-through rate?</td>
</tr>
</tbody>
</table>
Q2 – How do users feel about being informed of page issues? How does awareness of page issues affect their perception of Wikipedia?

<table>
<thead>
<tr>
<th>Qualitative research</th>
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<tbody>
<tr>
<td>- Do page issues make sense to readers?</td>
<td></td>
</tr>
<tr>
<td>- Do readers care about page issues? Do they find them useful? Important?</td>
<td></td>
</tr>
<tr>
<td>- Are readers familiar with page issues already? Have they seen them on other articles?</td>
<td></td>
</tr>
<tr>
<td>- Do readers understand how page issues work, i.e. how they appear on a page?</td>
<td></td>
</tr>
<tr>
<td>- Does becoming aware of page issues change readers’ perception of Wikipedia?</td>
<td></td>
</tr>
</tbody>
</table>
Additional research questions

Q3 – How do readers form opinions about the quality and reliability of Wikipedia pages in general?

Q4 – Do readers care more about issues considered by Wikipedia to be of higher severity than issues considered to be of lower severity?

Q5 – What feedback loops (if any) get activated as a result of increased awareness of page issues? E.g. do mobile edits increase with page issues as referrer? Does the new issue treatment changes affect issue removal rates?
Qualitative research format

Remote, unmoderated user tests conducted through usertesting.com
Users will be looking at an Invision prototype
Users are non-experts
4 test groups

<table>
<thead>
<tr>
<th>Group 1 (control)</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 4 participants</td>
<td>- 4 participants</td>
<td>- 8 participants</td>
<td>- 6 participants</td>
</tr>
<tr>
<td>- 2 women, 2 men</td>
<td>- 2 women, 2 men</td>
<td>- 4 women, 4 men</td>
<td>- 4 women, 2 men</td>
</tr>
<tr>
<td>- 2 under 40, 2 over 40</td>
<td>- 2 under 40, 2 over 40</td>
<td>- 4 under 40, 4 over 40</td>
<td>- 4 under 40, 2 over 40</td>
</tr>
<tr>
<td>- 2 US, 1 Australia, 1 Germany</td>
<td>- 3 US, 1 Australia</td>
<td>- 5 US, 1 Australia, 1 Canada</td>
<td>- 4 US, 1 Australia, 1 India</td>
</tr>
</tbody>
</table>

Will see 3 Wikipedia pages w/o any page issue notifications
Will see 3 Wikipedia pages w **current treatment** of page issue notifications
Will see 3 Wikipedia pages w **new treatment A** of page issue notifications
Will see 3 Wikipedia pages w **new treatment B** of page issue notifications
New treatment A

New treatment B

<< only for severe issues is title colored – otherwise it is gray
Research Results
Q1 – Does the new treatment for page issues increase the awareness among readers of page issues?

Step 1: Unprompted — participants were asked to casually read the page, and talk out loud about what they were looking at and what they were learning. *In this case it was entirely possible people saw the page issue notices but just didn’t think to mention them, since the instructions were so general (b/c we didn’t want to lead them on at all).

<table>
<thead>
<tr>
<th>Group</th>
<th>Control (ineligible)</th>
<th>Current Treatment</th>
<th>New Treatment A</th>
<th>New Treatment B</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of participants who mentioned the page issue notice</td>
<td>0% (0/4 participants)</td>
<td>25% (2/8 participants)</td>
<td>16% (1/6 participants)</td>
<td></td>
</tr>
</tbody>
</table>
Q1 – Does the new treatment for page issues increase the awareness among readers of page issues?

Step 2: Light prompt — participants were asked what they think about the quality and reliability of the page, putting them in a more critical/evaluative mindset

- **Group 1** control (ineligible)
- **Group 2** current treatment 0% (0/4 participants)
- **Group 3** new treatment A 50% (4/8 participants)
- **Group 4** new treatment B 33% (2/6 participants)

% of participants who mentioned the page issue notice (combined with participants who noticed in step 1)
Q1 – Does the new treatment for page issues increase the awareness among readers of page issues?

✓ Yes, the new treatment increases awareness of page issues among participants (particularly when they are in a more evaluative/critical mode)
✓ Surprisingly, treatment B did not perform better than treatment A
✱ Given small sample size these results are not statistically significant

Other thoughts:
- When readers are scanning a page critically they are more likely to notice page issues. Another way to think about this is that the notices are not particularly disruptive for casual readers.
- Surprisingly participants do not seem to notice version B more than version A (sample size was far too small to tell conclusively)
- Putting the title “Severe issue” in bright red seemingly doesn’t increase the % of users who notice the page issue
- Did not test placement at the bottom of the lead paragraph, but would like to
Q2 – How do users feel about being informed of page issues? How does awareness of page issues affect their perception of Wikipedia?

Part 1: Do page issues make sense to readers? Do they understand how they work?

- The majority of participants easily understood what the page issue notice was communicating to them.
- The general concept of a meta-data about the page was familiar. One participant was particularly suspicious of the warning (believers POV issue) and didn’t understand where it came from.
- In the case of “This article appears to contain a large number of buzzwords” several participants (ironically) were not familiar with the term buzzwords.
- When asked “Why do you think issues appear on certain articles? How are they detected? Who flags them?” participants mentioned: algorithms, Wikimedia staff, Wikipedia moderators, general public. Some responses here:

I believe there exists a community of content editors on Wikipedia who will self police the content. Some issues are contentious by nature so you would expect these articles to exist still. –samleng

I think, but I’m not sure, that there are Wikipedia ‘moderators’ who review and flag articles. –shelbydog

There’s probably an algorithm that Wikipedia uses in order to detect these types of issues. I’m not sure if it’s Wikipedia employees or the general public that flags these issues. –jprandle

I think other readers end up flagging articles. –TestedByShantay
Q2 – How do users feel about being informed of page issues? How does awareness of page issues affect their perception of Wikipedia?

Part 2: Do readers care about page issues? Do they find them useful?

- Participants were enthusiastic about page issues being shown to them. The response was overwhelmingly positive.
- 3 (of 22) participants proactively mentioned that they care about some, but not all, page issues

Some responses to “Do you care about page issues?”

Definitely, as mentioned the issues flagged influence my perception of the article before delving into reading it. For example if an article is flagged as subjective or false, I will be more wary and critical of its information.

–Boris.ng1

Absolutely. When you have a website that is dedicated to providing information on everything in the world, you need to have some checks and balances. Taking note of page issues is important.

–R.Armishaw

Yes. I want to know! I like the warnings.

–shelbydog

Yes a lot!! I think it's necessary to point the page issues out on the pages.

–rstorms27

Depending on the issue, yes. Reliability issues are bad but some layout issues aren't too important.

–bitbite999

Yes. When you have a website that is dedicated to providing information on everything in the world, you need to have some checks and balances. Taking note of page issues is important.

–R.Armishaw
Q2 – How do users feel about being informed of page issues? How does awareness of page issues affect their perception of Wikipedia?

Part 3: Does becoming aware of page issues change readers’ perception of Wikipedia?

I did not prompt for this explicitly, and in retrospect I think I should have. I think it’s telling that there were no participants in the study who, upon encountering page issues, started to question how Wikipedia actually works. In other words there was a high level of preexisting awareness that Wikipedia is an open, community-led project.

Judging by the enthusiasm consistently displayed across participants, I would venture to say that becoming aware of page issues makes users happier with Wikipedia as a service.
Q2 – How do users feel about being informed of page issues? How does awareness of page issues affect their perception of Wikipedia?

✓ Page issues make sense to readers and they understand how they work
✓ Readers care about page issues and consider them important
✓ Positive sentiments towards Wikipedia associated with readers learning about page issues

Other thoughts:
- Two page issues included in the testing contain language that was unfamiliar to many users: “buzzwords” and “notability guideline”. It could be interesting to think about making page issue descriptions more reader friendly.
- Slight confusion from 2 participants about an assumed connection between page issue notice and red links on page
Additional research topics

Q3 – How do readers form opinions about the quality and reliability of Wikipedia pages in general?

Things that were mentioned repeatedly by participants:

- **Formatting** (e.g. use of bullet points) raises perception of quality
- **Use of images** (especially color images) raises perception of quality
- **Technical language** raises perception of quality
- **Stats and figures** raise perception of quality
- **References** (Generally users seem to know to look for references. I did notice however that participants don’t seem to have a good conception of how many references a page *should* have. Some participants thought 4 references were “a ton”. In one case a participant thought a page had “too many references” although it’s unclear how this affected her perception of the article quality).
- **Length of article** (if an article is really long participants assume it’s high quality)
- **Balance between sections** (e.g. if one section is smaller than the rest readers see that as a sign of poor quality)
- **Familiar structure** to other similar articles they’ve seen (e.g. if it’s missing a section they are used to they think this is a sign of poor quality)
- **Recency of latest update** (the more recent the better)
Q4 – Do readers care more about issues considered by Wikipedia to be of higher severity than issues considered to be of lower severity?

At the end of the test users were shown 4 page issues in plain text, and were prompted: “Here are 4 different issues that are sometimes present on Wikipedia articles. Can you please pick the two that are most important to you to know about. Please explain your decision.”

<table>
<thead>
<tr>
<th>Notice</th>
<th># of votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>notice, move, protection</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Low</th>
<th># of votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>style</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medium</th>
<th># of votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>content, pov</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Severe</th>
<th># of votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>speedy, delete</td>
<td>20</td>
</tr>
</tbody>
</table>
Q4 – Do readers care more about issues considered by Wikipedia to be of higher severity than issues considered to be of lower severity?

Thoughts & Issues with these results:

- Answers were dependent on their understanding/interpretation of the issue description, so for example the medium severity issue “The topic of this article may not meet Wikipedia’s general notability guideline.” was not thought to be important to many participants of that group because they aren’t familiar with the WP notability concept.
- The set of issues shown to users was chosen based on the frequency they appear on English Wikipedia (see this doc for reference). However there wasn’t an equal representation/distribution of issues presented to participants, due to the unequal size of the groups and the rarity of notice-level issues appearing on English Wikipedia.
- It lead me to wonder if the issue descriptions are written in more of a contributor friendly way, or a reader friendly way. Or said another way, what would it look like to invest in making issue descriptions more reader friendly.
Q5 – What feedback loops (if any) get activated as a result of increased awareness of page issues? E.g. do mobile edits increase with page issues as referrer? Does the new issue treatment changes affect issue removal rates?

This is something we will be monitoring once the feature goes into beta.
I thought this was awesome and worth including : )


   Yes. For the most part you can feel the carefulness of language and citations to support it. On the rare occasion when it feels more assumptive or gossip/word of mouth than factual it kind of stands out in relief. If I get that feeling I often click through source links/note if none are provided which can confirm an doubtful/ill feeling. If one small element of a page seems off I tend to scrutinise everything on the page. Obviously if Wikipedia makes note of issue on a page I tend to ingest that pages content with an added grain of salt.

2. What do you think is the purpose of exposing these "page issues" to users is?

   To reinforce to readers and submitters that it is not an entirely un-policed site and that its raison d'etre is fact boosting its trustworthiness to readers and perhaps scaring off those with ill/self serving intent. Also as a warning to readers to be on alert when it is necessary and be properly skeptical and seek other sources to verify.

3. Why do you think issues appear on certain articles? How are they detected? Who flags them?

   I think it is a combo of AI/algorhyurmic text evaluation and community filed complaints/concerns and then frequency of edits or edit wars that the system flags up for review human or otherwise.

4. Do you care about page issues?

   YES. Wikipedia is a mostly trustworthy effort of well intentioned humans that is broadly useful in its gimlet eye content AND operates under a cooperative model that is an increasingly rare and important collective human endeavor. When either of these aims is transgressed its vital they are called out on the site, in order to preserve the integrity of it.
Thanks