

Heuristic Evaluation of [sharewaves]

Evaluator #A: Anonymous Aardvark

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1. Problem/Prototype

sharewaves provides a platform for people to rally around stories they care about, see what their community engages in, and get offline to spark political conversation and action in their area.

2. Violations Found

H3. User control and freedom / Severity 3 / Found by: A, B, C

Many times, there's no way to go back to the previous screen, for example:

- Can't exit to map from specific event page
- No way to cancel video or photo taking (can only cancel before posting, so you have to take a photo or video first)
- No clear way to exit from watching beach cleanup video posted by someone else in its entirety

Either add a back or cancel button whenever an exit option is not available, or make it so in some areas where it's intuitive, you can click elsewhere on the app to exit, ex) when you click a pin, but want to exit out, you just tap anywhere else on the map to go back.

H7. Flexibility and efficiency of use / Severity 0 / Found by: C

Certain intuitive "shortcuts" or gestures could be implemented to make going through the app faster for a more experienced user, like double tapping a pin to immediately open its contents or tapping the map or area outside of a prompt to return to a previous screen or cancel an action, instead of having to hit a "back" or "cancel" button. I don't currently see any, so try incorporating some.

H10. Help and documentation / Severity 3 / Found by: A, C

Currently, there is no in-app explanation of certain items and features like the trending bar. It would be helpful to have a tutorial or info page that guides you through how to use the app or what certain items do. On top of that, it would help establish the lingo over what each item or feature is called, ex) how each pin represents a "story," that the bar is called a "trending" or "pressure" bar, maybe the area someone drops a pin on can be called a "spot," etc. Either a walkthrough tutorial upon launch that can be re-accessed later if needed, or an info page users can access are sufficient solutions.

H1. Visibility of system status / Severity 3 / Found by: C

There isn't anything indicating how the map shown is determined. How far does the map go? Is it based on your GPS location and always displays x miles around you, or is it more fixed and based on something like your zip code? You also cannot see the area behind you. You don't necessarily have to give people too many options to customize their map with what areas or amount of distance are shown, but at least

conveying how or how much of the map area is determined would help, or using a standardized / conventional map that is familiar to mobile users. In the case of using a standardized map, you can rely more on user intuition and familiarity with maps (in) apps. There should either be something that displays your area, or you should be able to access some kind of “settings” to see that information.

H6. Recognition rather than recall / Severity 1 / Found by: C

The pins are generic pins until you click on them, then they show the media type. But if the pin type is already displayed on the initial map, then the user would have an easier time differentiating stories instead of relying on only memory and location of the pin. Alternatively, you can use colors to differentiate between the different types of pins. That might be more effective if there are a lot of pins on-screen.

H6. Recognition rather than recall / Severity 2 / Found by: A

After the user reads an article or watches a video, there is no indicator on the map noting that the article/video has already been read/watched. This forces the user to remember which beacons they have clicked, which could get too difficult if there are lots of beacons. Fix: add an icon to beacons that have already been clicked.

H8. Aesthetic and minimalist design / Severity 1 / Found by: C

The *sharewaves* logo next to the trending bar (especially in the same color) makes it look like it has meaning relative to the bar. You don’t even need to change the color or placement; I think you can just get rid of the sharewaves logo.

H4. Consistency and standards / Severity 2 / Found by: C

In another user’s video pin, you can see who exactly shares a story. In another user’s news pin, an anonymous user submits a story. While I assume that means it is optional whether or not to remain anonymous, whether that is the case or not is unclear. Do users get to toggle their identity options, and if so, how? Can you change it per submission or is it dependent on your account settings? ← You can choose one of those options depending on what the app intended to do.

- On that note, I think it was just a mistake, but when you click another user’s video pin before adding your own story, it says the video is shared by Jiayuan Chen. When you click that pin after sharing your story, it instead says it was shared by Anonymous Dolphin. So I am confused on whether this app was designed to have only anonymous users or not.
- We see that there are currently no Settings options, nor an option to choose during Submissions.

H8. Aesthetic and minimalist design / Severity 1 / Found by: C

The “More about this source” button is kind of wordy, takes up space, and extra time to read every time I look at it. Instead, you could incorporate an icon or symbol (like a question mark or eyeball) to indicate you can click for more info, and change the wording to either something short like “Source Info” or arguably not have to include any words at all, because the user can learn that it directs you to a page or pop-up that tells you more about the source. But something like “Source Info” might be better to decrease recall.

H8. Aesthetic and minimalist design / Severity 1 / Found by: C

The “More about this source” being red is distracting, since the color relative to other colors on the page makes it really jump out at you. My eye keeps being drawn to it but I don’t think it’s meant to be as important as something like the article’s information panel. Perhaps use a different color, like blue/gray, and the “Read” button can be red instead.

H4: Consistency and standards / Severity 2 / Found by: B

Button colors not consistent if they’re meant to convey certain functional information, for example:

- Colors of actionable buttons aren’t always the same
- Pins, “not feeling wavy today,” and “more about this source” buttons are red
- “read” and “watch” buttons are blue, the same color as some unactionable icons such as the dot representing your location and the bar measuring people’s interest in the current topic
- Having these colors be consistent would strengthen the relationship between different items.

Decide what you want each color to convey about a UI element’s purpose, without overloading the screen with too many colors. Change buttons and other UI elements’ colors to match this.

H4. Consistency and standards / Severity 4 / Found by: C

I don’t understand the news example given in the prototype. Based on the information panel, I was expecting the link to bring me to a single article, but it brought me to a list of articles, which I realize are all somewhat related to the Amazon based on what I’m guessing are the search results from the *BBC* website. So I assume you don’t have to link to one article specifically; you can also link to a website or its search results. But it is very confusing because the headline for the box when you clicked the pin was “Amazon Rainforest Burning,” with some kind of blurb, and then it led to a list of articles, some of which had nothing to do with the topic (like the article on the Pope and whether to allow married priests in the Amazon). What appears on the information panel and what the link actually leads to needs to be more clear. So if it goes to an article, then it can have either a summary or the beginning of that article, but if it goes to a website’s search results, it should say so. And there should be either moderation or a greater constraint to make sure the headline of the information panel matches the content of the news it leads to.

H7. Flexibility and efficiency of use / Severity 0 / Found by: C

Since there are only two options of what to share (Media or News), it seems unnecessary to have to click the “+” button in order to open up the other buttons. You could just have the camera and news button always on screen so they are faster to access. Is it designed this way to prevent accidentally opening one of the submission options? If so, that would make sense. If it is a problem of not wanting multiple icons to take up more space, I would understand that too.

H8. Aesthetic and minimalist design / Severity 1 / Found by: C

The UI can be obstructive to the view of the map and pins, ex) the “+” button is pretty big. What if there is a pin underneath any of these icons? There could be an option for the map with pins to additionally be viewable without some of the UI (+ button, trending bar, etc.) on top of it. For example, you can tap an empty area of the map once to switch UI’s.

H5. Error prevention / Severity 0 / Found by: C

Due to the constraint of this being a medium-fi prototype, I am aware that the only text we are able to paste into the news submission is the URL provided. However, I can't tell if it's also possible to paste text that is not a URL into the submission box, so if possible, be sure to make it so only links are submissible. Or display an error message if it's not a URL.

H8. Aesthetic and minimalist design / Severity 0 / Found by: A

When the user pastes a link to share, the text box says "Tap and hold to paste...". If we are assuming that the user knows how to use a touch-screen mobile device, it may not be necessary to give this instruction. Fix: Just have a blank text box.

H3. User control and freedom / Severity 4 / Found by: A, C

When the trending bar fills up, it automatically shows you the "Ride the Wave" screen, but if you exit out, there is no way to return to it. This could cause user disappointment. Fix options: Maybe clicking the trending bar can bring you back to that screen, and/or the events can be pins of a different color located where they are occurring on the map. And/or, have a cache with the events for each topic (as long as the bar is full for that topic) that is accessible from the home page.

H1. Visibility of system status / Severity 4 / Found by: B, C

There is nothing indicating how much time you have in this wave session until the wave resets. How are events curated for each wave, and how long do they stay up for? It would be good to either indicate this somehow (like a countdown timer until the next wave), or explain in a tutorial or help section how this process works.

H4 Consistency and standards / Severity 2 / Found by: A, B

Depending on whether the user clicks on "add video" or "add article", the emergency exit button either says "dismiss" or "cancel". Users may get confused by the different wording for the same function. Fix: use "cancel" for both, particularly because "dismiss" is a less intuitive word for the action.

H8 Consistency and standards / Severity 1 / Found by: A

The four purple circles are inconsistent with the "+35 others" button. Even though the circles are there to represent other readers, the fact that the number of circles is different from the number on the button feels incongruous and might mislead a user. Fix: Take away the circles/find another way to visually represent other readers

H5 Error prevention / Severity 1 / Found by: A

On the "Ride The Wave" page, there are blue arrows that the user might try to tap in an attempt to move to the next screen (if they didn't read the swipe instruction). This might cause inefficient tapping and user frustration. Fix: Remove blue arrows and keep the gray arrow (but make it not gray because it blends in/is hard to see against certain backgrounds).

H4 Consistency and standards / Severity 3 / Found by: A

“Not feeling wavy today” might not represent what the user is feeling, since they might actually be planning to join all the events offered and they are just trying to get back to the home screen to browse other topics. This might mess a little bit with the psychology of someone using the app. Fix: change “Not feeling wavy today” to “Back to home”.

H3 User control and freedom / Severity 3 / Found by: B

Cannot take desired action:

- Can’t sign up to go to events in the “ride the wave,” can only look at event information, so the interaction ends with user having to press “not feeling wavy today” button whether they intended to go to one of the events presented or not.

Add an RSVP or add to calendar option, and allow the user to exit the “ride the wave” screen that way as well (or another way that’s not the “not feeling wavy today” button if they intend to go to something).

H1 Visibility of system status / Severity 1 / Found by: B

Part of visual showing user’s action was completed is not noticeable. The prototype user might not realize that a new pin showed up in response to their post. Add a very short jump animation or a glow effect for a second or two to the new pin to draw the user’s attention.

H2 Match between system and the real world / Severity 2 / Found by: B

Meaning and origin of the expression “ride the wave” is unclear. The explanation of “ride the wave” was on track, but it still wasn’t exactly clear what “riding the wave” was or why it was being called “riding the wave.” The wave wasn’t established as a metaphor previously. Additionally, there is some minor confusion as to whether the metaphor is surrounding sound waves or ocean waves - aesthetic (logo and lines in the logo screen) suggests sound waves, picture on “ride the wave” screen suggests ocean wave. Introduce the waves metaphor earlier in the usage of the app, or weave references to the wave metaphor/what it means to “ride the wave” into the description more clearly. Explain what the wave is in relation to the filling of the bar at the top of the screen. Is it an indicator of the strength of the wave? A meter to show how close we are as a community to creating the wave referenced in the “ride the wave” pop-up?

H5 Error prevention / Severity 3 / Found by: B

Lacking checks for user intention after cancel button presses. There’s no check on the user to see if they really want to dismiss/discard their video or photo when they press that button. Similarly, there is no check if the user cancels after pasting a link, but the stakes there are lower since the user likely still has the link copied if they want to go back and paste it again. Add pop-ups which double check that the user intended to cancel these actions.

3. Summary of Violations

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
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H1: Visibility of Status		1		1	1	3
H2: Match Sys & World			2			2
H3: User Control				2	1	3
H4: Consistency			3	1	1	5
H5: Error Prevention	1	1		1		3
H6: Recognition not Recall		1	1			2
H7: Efficiency of Use	2					2
H8: Minimalist Design	1	5				6
H9: Help Users with Errors						
H10: Documentation				1		1
Total Violations by Severity	4	8	6	6	3	27
Note: check your answer for the green box by making sure the sum of the last column is equal to the sum of the last row (not including the green box)						

4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D	Evaluator E
sev. 0	1	0	3		
sev. 1	2	1	4		
sev. 2	2	3	1		
sev. 3	3	3	4		
sev. 4	1	1	3		
total (sev. 3 & 4)	4	4	7		
total (all severity levels)	9	8	15		

*Note that the bottom rows are *not* calculated by adding the numbers above it.

5. Summary Recommendations

Overall your prototype looks great and there were very few major violations! We love the concept and the flow of tasks feels very natural in terms of a user's needs in that moment. The interface is simple, clear, and intuitive. The biggest issues we found are 1) when a user clicks on another user's article link, the page that pops up is a page of links (some of which are unrelated to the topic) instead of the continuation of the article, 2) there's no way to return to the "Ride the Wave" page with the suggested events if users want to look at it again (especially a problem if they exited the page by accident) and 3) there's nothing indicating how much time there is left in a wave session after you leave the "Ride the Wave" page (or how the general wave process works).

Another main issue that all three of us identified is the lack of "back", "cancel", and/or "exit" buttons in many of the screens. For example, when the user clicks on a beacon to watch another user's video, they have to watch the whole video before being able to go back to the home page. This becomes a problem if they clicked on the beacon by mistake or if they decide they don't want to finish the video they started.

Other high-severity issues we came across were 1) there is no in-app explanation or tutorial for how to use the app, what different phrases mean, and what different indicators represent (like the bar at the top) 2) you can't sign up for events or mark them in your calendar in the wave page, you can only look at event information, and 3) the map is not standard (you can't see behind you, there's no radius defined, you can't zoom or move the map off of your location marker, etc.), so you can't rely on user intuition about how to use conventional mobile app maps.

Some minor issues we came across were: 1) After the user reads/watches a story, there is no indicator on the map noting that the article/video has already been read/watched. This forces the user to remember which beacons they have clicked, which could become too difficult if there are lots of beacons. 2) Buttons with similar functionality are named differently ("cancel" vs "dismiss") and often don't have a consistent color scheme, and 3) the meaning of "Ride the Wave" might not be totally obvious, for example if the user thinks the "wave" metaphor pertains to soundwaves (logo and lines in the logo screen suggest this).

Overall great job! We look forward to seeing how your high-fi prototype turns out.

Just additional feedback that doesn't fit heuristic violations but it's like small stuff:

How long do stories stay on the map? How long do your stories stay on the map? Is there a way to view what stories you posted besides finding your pins on the map?

What differentiates the gray pins from the red pins?

Trending bar

- The trending bar as it is currently designed is kind of ambiguous. Maybe it can be divided into segments or chunks to illustrate how many people have engaged so far versus how many more to go until it's full. Will it be updated to fill up in real-time to reflect engagement?
- How can you make trending bar's function more transparent and understandable? Will it show stats if you click on it? How many people does it take to complete the bar? What if a location doesn't have as many people in one area, then is what it takes to fill the bar dynamic/varies depending on the area? Can you explain more why the bar needs to be full in order for events to be suggested, or why there is even a need for a bar? Although I can come up with reasons behind the choice, I kind of questioned the value of filling up the trending bar (at least all the way) in order to access events. It's hard to tell what design decisions regarding it and the relationship between stories and events are more arbitrary, and what about having the trending bar adds value to the experience and especially the mission of the app. If the goal is to get people to go offline, then I personally feel like it could act as a barrier to people doing so, instead of the trending bar getting people fired up. But maybe other people would experience it differently. Perhaps an idea could be to show what events can be possible or "unlocked" if there is enough engagement, to entice users.
- Expanding on that: What if different types of events can be "unlocked" without having to complete the bar, but instead by reaching a milestone depending on the event, ex) only need to reach 2 people for a volunteer beach cleanup, but maybe 15 people for a cleanup sponsored by WWF, or 4 people minimum for a book club event.

When you click a pin, it enlarges the pin where it is located and then shows the information panel in the lower half of the screen. But what if the pin you are clicking on is in the lower half of the screen and would be covered by the information panel? I wonder if your design choice to put the panel on the lower half of the screen was influenced by the current demo of this prototype. If you click a pin that's in the lower half, would the map pan to center the pin on the screen so as to keep the info panel in the bottom half? Or are only pins that are in the upper regions of the screen visible to the user?

How are the profiles with faces in the "+x others" (under trending bar) selected to be shown? Are they your friends? If you click that, do you get to see other users' engagement? How are real identities 'verified' or linked to the app? Ex) One option could be in-app; another is through a third party like Facebook. What if there is identity impersonation? Just expand on user account settings/creation in hi-fi.

Can users view stories from multiple categories at once? Or is there a good reason for keeping them distinct? What if a story is relevant to multiple categories, ex) the environment and indigenous rights? How are categories decided? How else might users be able to categorize their stories? As it is now, it seems like you choose the category to share your story in order to categorize it as that one.

In the other user's news pin, who are the "+35 others" others – are they people that shared this news story too, people that are reading this news, or something else? If they are also people sharing it, how does it decide which user you get to see on the map that shared it? On that note, what will you do about users who are in the same general area but share the same articles in different parts of town? Will you simply have repeat articles, or will repeat articles be consolidated? I would rather have replica stories be consolidated so as to not clutter the map, but maybe when you click it you can also see the different parts of town multiple users have shared it. But then how do you decide which single pin you show on the map? Maybe it can be based on who shared it first, or frequency shared in one particular spot.

When submitting a video, can you also add something from your gallery?

Ride the Wave: Unless there is a reason not to, there should be a way to RSVP for an event, see how many other people are interested in going, and see if your friends are going, in order to gauge attendance. While not showing attendance could prevent people from bailing if there are few attendees, the con of someone showing up alone to an event and wasting their resources is worse than people being dissuaded from going because of low attendance.

What if the trending bar is filled while you are not currently on the category that got filled? When you switch to that category, then does the ride the wave screen immediately pop up? Or does it pop up regardless to show that it is something your community is interested in?

Severity Ratings

- 0 - don't agree that this is a usability problem
- 1 - cosmetic problem
- 2 - minor usability problem
- 3 - major usability problem; important to fix
- 4 - usability catastrophe; imperative to fix

Heuristics

H1: Visibility of System Status

- Keep users informed about what is going on

H2: Match Between System & Real World

- Speak the users' language
- Follow real world conventions

H3: User Control & Freedom

- "Exits" for mistaken choices, undo, redo
- Don't force down fixed paths

H4: Consistency & Standards

H5: Error Prevention

H6: Recognition Rather Than Recall

- Make objects, actions, options, & directions visible or easily retrievable

H7: Flexibility & Efficiency of Use

- Accelerators for experts (e.g., gestures, kb shortcuts)
- Allow users to tailor frequent actions (e.g., macros)

H8: Aesthetic & Minimalist Design

- No irrelevant information in dialogues

H9: Help Users Recognize, Diagnose, & Recover from Errors

- Error messages in plain language
- Precisely indicate the problem
- Constructively suggest a solution

H10: Help & Documentation

- Easy to search
- Focused on the user's task
- List concrete steps to carry out
- Not too large

Prototype Description

I am evaluating the Sharewaves prototype. Sharewaves is a platform that allows people to engage in political conversation and action in their daily lives by seeing events and stories near them on a map.

Violations

1. H3 User Control and Freedom
When you click on a story from the map, there is no way to go back without watching the video/seeing the photo, or reading the article. Users may accidentally click on a story and then decide they don't want to view it.
Fix: Add a cancel button
2. H5 Error Prevention
User can paste link to non-political related news. This will negatively affect other users who may see boring or inappropriate news.
Fix: Add human moderators or digital link checking
3. H6 Recognition Rather Than Recall
When posting a link to an article, there is no reminder that you are meant to put a link to an article. It just says "Paste Link." Similarly to Violation 2, users may forget what to post and post irrelevant links.
Fix: Say "Paste Article Link" instead of "Paste Link"
4. H4 Consistency & Standards
"Not Feeling Wavy Today" and "Show me Something Else" appear in the same place on the screen but use different phrasings and have different functions. The "Not Feeling Wavy Today" negation is a bit discouraging and brings you to the homescreen while the "Show me Something Else" gives you another event. A User might click that part of the screen expecting to go to the home screen and then be confused when it does not.
Fix: Have separate buttons for homescreen and for going back to Ride the Wave page.
5. H3 User Control and Freedom
The Ride the Wave page appears somewhat randomly. The user is unable to navigate to the page by themselves, even once they get the needed points.
Fix: Add "Ride the Wave" access page to map home screen
6. H3 User Control and Freedom
When taking and posting a video, the User only has the option to Dismiss and Post. They do not have the option to re-take the video. This might be useful to people who are taking videos live.
Fix: Add re-take video button.
7. H10 Help and Documentation

There is no description of what the bar of the top of the map screen does or is measuring. Users will be confused as to why it is there and why the increases in bar/points are happening.

Fix: Add information button or hover over information for the bar.

8. H2 Match between System and Real World

Users may want to upload videos or news stories at a different place than where they are currently located. But, you can only put the map where you are currently located, and you can only put a video in the current location.

Fix: Users should be able to define a location for a story they are adding.

9. H8 Aesthetic and Minimalist Design

In the “Ride the Wave” page, the arrows under the event title text makes it difficult to read.

Fix: Remove arrows.

10. H4 Consistency and Standards

Ride the Wave! Page has an image before the title text while the event pages in the same layout do not. This is confusing and causes the user’s eye to have to readjust to the varying locations of text

Fix: Remove image from before “Ride the Wave” or add images/icons to all titles.

11. H6 Recognition Rather Than Recall

When looking at the video of an event, you cannot see what the event is or where it is. Users may forget what they are looking at and why.

Fix: Add info box about event title and location to be seen when watching a video story

12. H3 User Control & Freedom

User cannot exit video when viewing video story. This may force the user to watch the video for longer than they want to.

Fix: Add cancel or home button to video story screen.

13. H6 Recognition Rather Than Recall

Once you view a story, it still looks the same as before you viewed it. The user, looking at the map, cannot tell which stories they have already engaged in.

Fix: Change color of pin after user engages with it.

14. H4 Consistency and Standards

In the Ride the Wave page, environmentalism is underlined and bold. No where else in the app is there something both bolded and underlined. It is a bit jarring and draws attention away from the rest of the page.

Fix: Remove underline

15. H4 Consistency and Standards

The pink color is used for other user’s pins and for Cancel and returning Home. The association with leaving/cancelling something and the content from the same colors may confuse the user.

Fix: Use black color for cancel and leaving a page

16. H1 Visibility of System Status

When looking at the news article/story, it feels like you are on a normal safari browser and not in an application. Users may forget they are in an application and begin web browsing.

Fix: Put the news articles into an interface within the app instead of linking to Safari/browser

Summary

Category	# Violations
H1: Visibility of System Status	1
H2: Match b/w System & World	1
H3: User Control & Freedom	4
H4: Consistency & Standards	4
H5: Error Prevention	1
H6: Recognition not Recall	3
H7: Flexibility & Efficiency of Use	0
H8: Aesthetic & Minimalist Design	1
H9: Help Users with Errors	0
H10: Help & Documentation	1
Total Violations	16

Recommendations

Overall, the application is aesthetic and uses minimalist design. The simple font, clean colors and intuitive visuals make it is easy to follow and pleasant to use. The primary issues arise in the user's freedom to navigate between and within tasks, and in the consistency of meaning of color and screen placement of action buttons and images. More attention should also be paid to the user's ability to recognize what stories they have already viewed, and recognize what they are viewing within a story. It would be useful to have more information and instructions in the home screen. Only after playing with the application for an hour did I realize that the blue points bar filling up is what prompted the the "Ride the Wave" page. It might also be useful to include more information in the story pins themselves. It would be nice to know whether a pin is news or an event before clicking on it. It would also be nice to be able to see which stories you have already engaged with. One thing that I felt was missing from the application is engagement with

other people. Though you see who posted a story and faces of other people in the same domain (ex: environmentalism) as you, it is unclear how you might be able to engage with them directly. I would love to see more features that allow for person-to-person conversation, or emphasize the people behind the news and events. I am excited to see how the app turns out once more advanced interactions like hovering and scrolling are included!