ICSE User Studies

response to ads (0)

Stop using the app (9)

Phase 1 User Study 5

yeah, I have had that experience like sometimes, if you know, I'm trying to get through an app, and there's so many advertisements that I can't, you know, really use it without a big you know a big deal. then sometimes I will stop using them, or if they're and I've had this happen, you know, even with the, you know, lots of different ads where our apps, where they'll, you know, have the videos. And if I can't get out of it or use it. and I keep getting stuck. Yeah, then, I stop using the app

Phase 1 User Study 5

eah, I have had that experience like sometimes, if you know, I'm trying to get through an app, and there's so many advertisements that I can't, you know, really use it without a big you know a big deal. then sometimes I will stop using them

Phase 2 User Study 4

Given how disruptive these advertisements are, and given that they're playing audio, and I'm unable to close this one in particular. I would probably try and find an alternative.

Phase 2 User Study 4

And would definitely I, personally, would not be using that application.

Phase 1 User Study 1

Has an advertising that ever made you not use an app.

Interviewee: Probably. But it's been a really long time since I've encountered something like that.

Phase 1 User Study 2

Most likely I uninstalled the app.

Phase 1 User Study 2

That's the only solution I'm aware of and in complete honesty, if I were to encounter a situation like this within an app, it would biased me against using that app because this is clearly an accessibility issue.

Phase 2 User Study 1

if there's an ad start and there's no physical, no visible way to exit it. Then you know, the app just it's not worth my time.

Phase 1 User Study 2

It has in the past, if the ads are aggressive and there is no way to disable them, most often, if the app is not absolutely necessary to get something done.

Skipping/exiting ad ASAP (19)

Phase 2 User Study 4

It's a lot more manageable. And I'm able to kind of navigate around them. typically, with an application I I get very familiar with, and I kind of know where the advertisement are on the screen, and I can kind of skip around them.

Phase 3 User Study 5

He successfully passed the native ad and went directly to the button for adding a budget plan.

Phase 2 User Study 5

No, no, I try to avoid.

Phase 1 User Study 5

Oh, no, because I thought, how am I going to get rid of it? Because right away, when those play? That's exactly what I think is, oh, no.

Phase 3 User Study 4

As soon as she interacted with the ad, she started to navigate back.

Phase 2 User Study 4

Yeah.

Phase 2 User Study 5

Well, sometimes I've had them where they kinda, I get stuck in them. So I always, I mean, it doesn't happen as much anymore. But it used to happen to me. So I have a tendency to want to get out of it as soon as I can.

Phase 2 User Study 5

Well, this one was a little weird because I didn't know what it was, so it was kind of like, okay, got to hurry up and get past all these numbers.

Phase 1 User Study 5

I just try to get past them.

Phase 1 User Study 5

I just heard it say something, and I thought, Oh, no, because I thought, how am I going to get rid of it?

Phase 1 User Study 5

And so I went past that

Phase 1 User Study 4

So I went past it.

Phase 1 User Study 4

[immediately realizes it's the ad after pressing the add button.

Phase 3 User Study 3

The only thing the only thing that I want to do is pass it.

Phase 1 User Study 3

So I think, eventually, I think I just closed it, and when it opened back up, I, because it's I'm thinking of a game I was playing, and it was, you do this and you'll get, you know, bonus gold by watching the advertisements and that's where you get stuck. So I just skip that and don't do it.

Phase 1 User Study 1

Yeah.

Phase 1 User Study 1

[closes advertisement immediately]

Phase 1 User Study 2

Exactly.

Phase 1 User Study 1

I've noticed the little bit of text, you know, so I think it was an ad. [Once I realized it was an ad,] I just wanted to skip over it, like I just wanted to pass it.

Biased the user (4)

Phase 2 User Study 3

[In the middle of executing] I will just say right now that the fact that I have not been presented with an ad yet strongly biases me towards using this premium version.

Phase 2 User Study 3

And an experience like this would strongly bias me against using this app.

That's the only solution I'm aware of and in complete honesty, if I were to encounter a situation like this within an app, it would biased me against using that app because this is clearly an accessibility issue.

I find it distressing to see how much the presence or lack of ads can bias a user's experience.

business aspect (0)

-Get everybody to pay the premium (1)

And again,it could be an extortion system, although my expectation is that ultimately it would be more of a system aimed at everybody, trying to get everybody to pay the premium, to do away with the annoyance.

role of ads in financing (3)

I understand why it's done, but ideally, I want app developers to offer me a paid alternative.

Okay, I get it because you gotta make money off the application. I understand that, especially if it's a free app.

To me, it's not necessarily evil because I know especially when an app is not being paid for by the users, somebody has to, you know that the advertisement sort of has to be there right?

responsibility (3)

not for inaccessible advertising, because I don't really think that, I mean, I guess it is partially up to the application developer to use accessible advertising, but it is also very much the fault of the advertisers in general.

they weren't. No, they didn't have access. They didn't have control over it.

Phase 1 User Study 4

Actually, yes, but partially no. And I think if developers have to pay ads, either ad agencies, or if they pay for the ads themselves, and then in a way they do.

Empathy toward developers (6)

"unfair to the developer"

Phase 2 User Study 4

I can't really fault developers for needing to make money on their application.

Phase 3 User Study 3

Like, I understand that they have to be there.

Phase 1 User Study 3

Okay, I get it because you gotta make money off the application.

Phase 2 User Study 2

To me, it's not necessarily evil because I know especially when an app is not being paid for by the users, somebody has to, you know that the advertisement sort of has to be there right?

Phase 1 User Study 2

Not very often, I don't, again, I don't prefer to contact developers over ads, because many times I suspect they're using a third party ad agency to deliver the ads, and they may not have much control over what ads show up, how they're presented.

Phase 1 User Study 2

It seems a bit unfair to the developer of the app.

Developers have no control (4)

Phase 1 User Study 4

they weren't. No, they didn't have access. They didn't have control over it.

Phase 2 User Study 2

So you guys don't, you guys don't make the advertisement, so that's out of your control.

Phase 1 User Study 2

Not very often, I don't, again, I don't prefer to contact developers over ads, because many times I suspect they're using a third party ad agency to deliver the ads, and they may not have much control over what ads show up, how they're presented.

 But for the most part, you know, like when you're on a page and you see like ads by Google, or whatever like or something like the person that created the app has no control over what the ads are.

developer responsibility (12)

+awareness

Phase 2 User Study 4

I guess it is partially up to the application developer to use accessible advertising

Phase 2 User Study 4

 not for inaccessible advertising, because I don't really think that, I mean, I guess it is partially up to the application developer to use accessible advertising, but it is also very much the fault of the advertisers in general.

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Phase 1 User Study 4

Actually, yes, but partially no. And I think if developers have to pay ads, either ad agencies, or if they pay for the ads themselves, and then in a way they do.

Phase 2 User Study 3

 It would all depend on how much control the app developer had over what ads would be shown, and how they would be shown if they, if the developer was relying on a third party system, then there are multiple parties involved.

Phase 2 User Study 3

 It would all depend entirely on how aware the developers of the app were of the inaccessibility of their ads, which my guess is, since the visually impaired community is so small, the awareness is likely to be low.

Phase 3 User Study 2

 Because they are the ones who created the app and so if if they are going to inject ads into the app, then they need to have an accessible way to close the ad.

Phase 3 User Study 2

I feel it's pretty easy to navigate if the developer of the app implements close ad button in the actual advertisement, you know, like, in the actual app itself.

Phase 2 User Study 2

So you guys don't, you guys don't make the advertisement, so that's out of your control.

Phase 1 User Study 2

, because many times I suspect they're using a third party ad agency to deliver the ads, and they may not have much control over what ads show up, how they're presented.

Phase 1 User Study 2

But if a developer is going to host ads that are inaccessible, that's still, is a cause for concern, in my opinion, as a user.

ad creator responsibility (5)

Phase 2 User Study 4

, but it is also very much the fault of the advertisers in general.

Phase 2 User Study 4

not for inaccessible advertising, because I don't really think that, I mean, I guess it is partially up to the application developer to use accessible advertising, but it is also very much the fault of the advertisers in general.

Phase 1 User Study 4

I don't know. Actually, yes, but partially no. And I think if developers have to pay ads, either ad agencies, or if they pay for the ads themselves, and then in a way they do.

Phase 2 User Study 3

It would all depend on how much control the app developer had over what ads would be shown, and how they would be shown if they, if the developer was relying on a third party system, then there are multiple parties involved.

Phase 2 User Study 2

I mean, I guess it depends on the creators that, you know, how much you choose what gets advertised.

ad library responsibility (7)

Phase 2 User Study 4

, but it is also very much the fault of the advertisers in general.

Phase 2 User Study 4

not for inaccessible advertising, because I don't really think that, I mean, I guess it is partially up to the application developer to use accessible advertising, but it is also very much the fault of the advertisers in general.

Phase 1 User Study 4

I don't know. Actually, yes, but partially no. And I think if developers have to pay ads, either ad agencies, or if they pay for the ads themselves, and then in a way they do.

Phase 1 User Study 4

Actually, yes, but partially no. And I think if developers have to pay ads, either ad agencies, or if they pay for the ads themselves, and then in a way they do.

Phase 2 User Study 3

It would all depend on how much control the app developer had over what ads would be shown, and how they would be shown if they, if the developer was relying on a third party system, then there are multiple parties involved.

Phase 2 User Study 2

I guess there's a third party somewhere there that has control over the specifics of the ads, right?

Phase 1 User Study 2

I've noticed that many websites tend to display Google ads, and that alone tells me that they're relying on Google to display and procure the ads, which means they don't have direct control.

Other ways to block ads (1)

Phase 3 User Study 5

No unlabeled graphics, ideally, there needs to be some ad texts to tell me what the ad is trying to sell me. Many times I've seen ads where all it is a picture, or like a silent video, and I have no idea what I might be clicking into, those ads make me very nervous.

----ability to remove ads on websites (1)

Phase 2 User Study 4

On websites, it can be very hit or miss, because you have, you know, a variety of add-ons for web browsers that can alleviate this kind of thing. And that's what I typically use. so I don't have a lot of experience with advertising on websites. I typically try and and remove as much of that as I enable.

Ad blockers won't work on mobile apps (2)

Phase 2 User Study 3

Not that I'm (aware of). The only way I know of to block ads and applications is usually involves paying to remove them.

Phase 2 User Study 2

I haven't installed it on the phone. I can't because the phone has, you know, we're mobile, you're mostly using, you know, separate apps. I mean, of course, companies want you to use their apps, like, you know, even like, when you use Youtube right? Use the Youtube app, you can't really block the ads., whereas you can on a web browser.

Ad blocker (4)

Phase 2 User Study 4

 On websites, it can be very hit or miss, because you have, you know, a variety of add-ons for web browsers that can alleviate this kind of thing.

Phase 2 User Study 3

 I do utilize on my desktop at least an ad blocking extension to my browser of choice, to do away with those ads to stop them from trying to grab my screen readers focus and and be aggressive.

Phase 2 User Study 2

 You know, it's just like this is why I use an ad blocker.

Phase 2 User Study 2

 It works for our web applications on the computer.

--Uses VPN to block problematic ads (1)

Phase 3 User Study 3

 And it's kind of complicated, you know, I have to like start using a A VPN and blocking specific coasts and stuff like that.

Zoom (0)

- Zoom influences users to recognize the ad (1)

Phase 1 User Study 3

But with Zoom being on, I wasn't even thinking.

- Zoom influences users to close the ad (4)

Phase 2 User Study 3

But apparently the close button does not want to work.

Phase 1 User Study 3

normally, if I don't use zoom, because the zoom sometimes gets in the way of what's on, what I'm doing on the screen with the application and it sometimes it'll move it up.

Phase 1 User Study 3

I mean like, I said, if probably more than likely I may have been able to go to the bottom, but with the zoom in the way, it was just easier to swipe through it, because normally I'd go down to the bottom and see if there's a close button. I wouldn't normally swipe all the way through, but the zoom sometimes gets in the way on the screen.

Phase 1 User Study 3

, and maybe I could if the Zoom wasn't up on the screen.

- Zoom is a WebView (1)

Phase 1 User Study 3

You know what, because when I was hearing the web view, I wasn't even thinking, because my zoom is a web view.

WebView (8)

Phase 2 User Study 1

Most of them are cumbersome to use, particularly because they trap, they sometimes trap you in a WebView and you can't get out of it by standard TalkBack back gestures.

Phase 2 User Study 4

Okay, now, what I think (is that) the screen just changed, because talk back just announced web view again without me touching the screen.

Phase 1 User Study 3

[TalkBack can only focus on the WebView, the played video.

Phase 1 User Study 3

You know what, because when I was hearing the web view, I wasn't even thinking, because my zoom is a web view.

Phase 1 User Study 3

TalkBack can only focus on the WebView, the played video. None of the elements, including the install button for that advertisement, is locatable by using TalkBack.

Phase 1 User Study 2

Oh dear, this one even, when I tried to click on the WebView, it took me out of the app into the play store, trying to install something, again, looks as though I'm gonna have to close out of the app and relaunch.

Phase 2 User Study 1

I mean, sometimes, yes, because sometimes WebView can be a little bit inaccessible depending on the app layout, anything on how they're coded.

Phase 2 User Study 2

Talkback can only focus on the WebView.

TalkBack OCR (0)

TalkBack capability - OCR (9)

Phase 2 User Study 5

TalkBack generates a label for the unlabeled close button.

Phase 2 User Study 5

TalkBack failed to automatically generate a label for the unlabeled button this time.

Phase 2 User Study 4

So talk back actually did an automatic detect on that.

Phase 2 User Study 3

But I think talk back was able to automatically recognize the image and provide smart analysis.

Phase 2 User Study 3

He navigates through the ad, reaching the unlabeled button, which TalkBack recognizes as a close button.

Phase 2 User Study 2

TalkBack was able to generate a label for that unlabeled close button, so he closed the ad by clicking that button]

Phase 2 User Study 1

[TalkBack generates a label for the unlabeled close button-"Detected, text X, Button".

Phase 2 User Study 1

 But TalkBack did recognize it as a X, as, you know to close it (the advertisement).

Phase 1 User Study 1

Talkback tried to OCR it

TalkBack OCR is not always reliable (6)

Phase 2 User Study 5

 Sometimes it works and sometimes it doesn't on my phone.

Phase 2 User Study 4

And not all versions of Android and talk back have OCR, so really, that is only for anything running android 13.

Phase 2 User Study 4

So the only reason that talk back was able to use this or read this is because I have optical character recognition enabled. And so it's able to automatically, every once in a while, read text that it sees. And in this case it's an X button. That might not always be the case. It's very hit or miss. And I don't like relying on it.

Phase 2 User Study 5

 I don't know but it's certainly running the latest version, but sometimes it reads it reads descriptions, and it says detected, and then other times it doesn't.

Phase 2 User Study 1

 You know, but that doesn't always work, it's not always reliable.

Phase 2 User Study 1

 Because I've seen instances where the button recognition, the button detection doesn't work, you know, and so it can't be relied upon, 100% of the time.

----TalkBack OCR is only for Android 13 (1)

Phase 2 User Study 4

And not all versions of Android and talk back have OCR, so really, that is only for anything running android 13.

Familarity (0)

unfamiliar with app (5)

Phase 3 User Study 3

So I was using like Snapchat just for a test, right like, I don't actually use Snapchat, but I don't, and like I have no idea I had no idea where anything on the snapshot screen was right like it's just anything, and I don't know but you know it didn't help that. A lot of their features didn't have like understandable text labels. And so it was just like going through stuff. And like, you know, for all I know, any of that could have been in part of an ad, or it could have been part of the app like there was no way of knowing

Phase 3 User Study 3

And because I wasn't familiar with the app. Yet at first, right like I didn't know exactly like. Now I expect I know what I expect to see, so I know when something is not actually part of the app right? Like, you know, I can't always tell that something is an ad unless [I'm quite familiar with the app]

Phase 1 User Study 3

It doesn't tell me that it's you know I didn't know it was an advertisement, and since I don't know the app, I didn't know if it was the app actually doing it, or if it was an advertisement doing it.

Phase 1 User Study 3

Yeah, that made me think it was an advertisement, but I wasn't sure, because I haven't been in the app before, so I'm like, well, maybe it's a part of the app, and that's why I was thinking that.

Phase 1 User Study 2

I wasn't entirely sure what they were since I'm not familiar with the app, I'm not sure.

familiarity with the app helps navigating (9)

Phase 2 User Study 4

It's a lot more manageable. And I'm able to kind of navigate around them. typically, with an application I I get very familiar with, and I kind of know where the advertisement are on the screen, and I can kind of skip around them.

Phase 1 User Study 5

Well, you know, as I get more familiar with the app I will do some things by explore, by touch, because it's just it's easier, you know, than having to swipe through everything.

Phase 2 User Study 4

nd I'm able to kind of navigate around them. typically, with an application I I get very familiar with, and I kind of know where the advertisement are on the screen, and I can kind of skip around them.

Phase 1 User Study 4

Once I knew how to get around the first one, I could use the second one without any difficulty.

Phase 3 User Study 3

Now I expect I know what I expect to see, so I know when something is not actually part of the app right? Like, you know, I can't always tell that something is an ad unless [I'm quite familiar with the app]

Phase 3 User Study 3

I expect to see the navigation drawer, and I expect to see the budget plan and the expenses and all the different categories with the quick tick boxes. And if I don't see that I know that I'm not really in the app.

Phase 1 User Study 3

I didn't, or I knew where I was looking, so it was quicker to find it.

Phase 1 User Study 3

It's up that one, I don't, I didn't really notice the ads in that one.

Phase 1 User Study 2

And some of it again, the more familiar with an app that I am, the faster I tend to navigate through it, because I've memorized button placement.

Comparison (0)

-Dynamic ad appears more frequently on web pages (1)

Phase 2 User Study 3

Usually more web pages.

"Ad" vs "Add" (6)

Phase 3 User Study 4

No cause I mean the screen reader reads it as ads, so when it says close ad, I'm assuming it's the ad that's sitting there on top of that area, because I can't get at the category to add without closing that first, so I know that's the actual Facebook ad.

Phase 2 User Study 4

So there is a button called, add app icon [it was actually AD icon] and I have to assume this is to add a new category. So I'm going to go ahead and double check this.

Phase 2 User Study 4

So there is a button called, add app icon [it was actually AD icon] and I have to assume this is to add a new category.

Phase 1 User Study 4

There's an ad app icon and at first I thought it was saying like, add something.

Phase 3 User Study 2

Yeah, yeah, yeah, yeah. I mean like I assumed that this was an app because it said Media View, you know. But I wasn't sure. So until I swiped right and I saw always an ad icon. Okay, that probably means an ad, you know.

Phase 3 User Study 2

So do you get confused, which add it means, is it with one d or 2 ds.

Games vs Apps (2)

Phase 1 User Study 2

If it's a game, a lot of times I've noticed games tend to have a lot of intrusive ads with little to no method of remediation.

Phase 1 User Study 2

It has in the past, if the ads are aggressive and there is no way to disable them, most often, if the app is not absolutely necessary to get something done. If the ads are too intrusive, I will either opt to pay them away or do away with them

--Past vs Now (4)

Phase 2 User Study 4

So it's an improvement in talk back. It's also an improvement in web views. I'm sure you've heard me mentioned countless time web views, and that's essentially what talk back uses to navigate web-based content. And so when web views that's updated, it means that talk back's ability to interact with them gets updated as well, so they kind of work together.

Phase 2 User Study 4

So previous to this, typically when an advertisement was displayed, it would almost guarantee Talkback would just get stuck in its tracks. I would not be able to navigate at all, and I would have to wait several seconds for talk back to catch up. with recent developments in technology and processor speed. And most importantly, talk back optimizations. I feel like that has been a lot less of an issue lately.

Phase 3 User Study 3

It's like all those changes are just there for other people. It doesn't really benefit me a lot of the time, like, you know, it's just like all that, that the web is so much that's here now, and more complicated, and that I don't know.

Phase 3 User Study 3

Like, you know, you can't do anything online without being bombarded with ads, and that that wasn't how it was when I started. And the thing is like because I don't see pictures. And I don't see the you know, the cool new graphics and stuff like that. Like to me the Internet fundamentally in the way that I use it. It's not that different than it was like a long time ago, you know, like it's all still text.

----Improvements of WebView and TalkBack (1)

Phase 2 User Study 4

So it's an improvement in talk back. It's also an improvement in web views

----Ads on the web are more intrusive (1)

Phase 2 User Study 4

so I don't have a lot of experience with advertising on websites. I typically try and and remove as much of that as I enable. Because on websites, it really is a lot more intrusive.

----Easier to identify ads on native apps (1)

Phase 2 User Study 4

So typically, I would say that native applications, the only web-based part of the native application are the advertisements because they are web-based

caring about ad content (28)

Phase 1 User Study 5

So I honestly, I mean, I don't really pay that much attention to a lot of ads. I mean, maybe if there were like this fascinating app that it was advertising, and I just happened to listen to it, maybe, but generally speaking, I don't, really. I don't pay a lot of attention to it.

Phase 1 User Study 5

So I honestly, I mean, I don't really pay that much attention to a lot of ads.

Phase 1 User Study 5

because my idea, when I do an ad, I don't really pay attention, you know.

[Phase 2 User Study 4](#)

Not particularly. I really don't pay much attention to, said Ads

[Phase 2 User Study 5](#)

 I just listen to a little bit of the numbers up, don't want to listen to that and keep on going.

[Phase 1 User Study 5](#)

Honestly, I don't even remember I didn't even know a lot of it what it was for. because my idea, when I do an ad, I don't really pay attention, you know

[Phase 1 User Study 5](#)

well, I don't know. It said something. I'm not really sure what it said.

[Phase 1 User Study 4](#)

 Oh, I guess it depends on the application they're are advertising for.

[Phase 1 User Study 4](#)

Oh, I guess it depends on the application they're are advertising for. It just really depends on the on the app

[Phase 3 User Study 2](#)

Honestly? No, I didn't. Well, set a limit ontexting, and you know, calling, and that's about it, you know, for the TextNow app. But the other ones, I have no idea. So you know.

[Phase 3 User Study 2](#)

Honestly. No

[Phase 3 User Study 2](#)

Did you retain any information from those?

Interviewee: Honestly? No, I didn't. Well, set a limit ontexting, and you know, calling, and that's about it, you know, for the TextNow app. But the other ones, I have no idea.

[Phase 3 User Study 2](#)

 No, I didn't.

[Phase 3 User Study 3](#)

Like I don't really know what they were all about like. It's just it's just whatever to me

[Phase 3 User Study 3](#)

No, I don't pay attention to ads at all, like I generally just tune them out completely. Like, I understand that they have to be there. But I don't know like it's sort of just background noise. I guess I don't really. I don't know what they're trying to sell me.

Phase 3 User Study 3

But it's not really what I'm like. It's not what I'm interested in, so I don't really like it.

Phase 3 User Study 3

Like I don't really know what they were all about like.

Phase 3 User Study 3

No, I don't pay attention to ads at all, like I generally just tune them out completely.

Phase 3 User Study 3

But it's not really what I'm like. It's not what I'm interested in, so I don't really like it.

Phase 2 User Study 3

I did retain the fact that they were trying to sell some form of.. one was trying to sell some form of dental apparatus to remove migraines, only because I have a family member who suffers from migraines. But I still found that no less intrusive. And my cynical mind knows that advertisers often greatly hype the benefits of their products to an extent as to render them almost untrue to get you to buy it.

Phase 1 User Study 3

I don't know if it's wanting me to, if there's like an advertisement there, and it's wanting me to install a special specific app that's listed because I didn't really, wasn't paying attention to those.

Phase 2 User Study 3

I did retain the fact that they were trying to sell some form of.. one was trying to sell some form of dental apparatus to remove migraines, only because I have a family member who suffers from migraines.

Phase 1 User Study 1

perhaps I didn't really pay too much attention to it?

Phase 2 User Study 2

there is something in my brain to like it automatically just kind of switch it off. I don't even know what that thing was trying to advertise, it's just noise.

Phase 1 User Study 2

Not usually.

Phase 1 User Study 2

[He passed through the native ad; it didn't catch his attention.

Phase 2 User Study 2

They're clean, it's just noise. I like, I don't know, there is something in my brain to like it automatically just kind of switch it off. I don't even know what that thing was trying to advertise, it's just noise.

Phase 1 User Study 1

 No.

- Catch user attentions only if it's important (3)

Phase 1 User Study 5

 I mean, maybe if there were like this fascinating app that it was advertising, and I just happened to listen to it, maybe, but generally speaking, I don't, really.

Phase 1 User Study 4

Oh, I guess it depends on the application they're are advertising for. It just really depends on the on the app

Phase 1 User Study 3

No, No, because I'll say this with the screen reader, you learn to, you can listen and swipe it. So it's kind of like you listen, if it's important, it'll catch my attention. If not, if it's not really what I'm looking for. What I'm needing to do, I'll just go past it,

Did not retain any information from the ad (7)

Phase 1 User Study 5

So I honestly, I mean, I don't really pay that much attention to a lot of ads. I mean, maybe if there were like this fascinating app that it was advertising, and I just happened to listen to it, maybe, but generally speaking, I don't, really. I don't pay a lot of attention to it.

Phase 1 User Study 5

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Honestly, I don't even remember I didn't even know a lot of it what it was for. because my idea, when I do an ad, I don't really pay attention, you know

Phase 3 User Study 2

Honestly? No, I didn't. Well, set a limit ontexting, and you know, calling, and that's about it, you know, for the TextNow app. But the other ones, I have no idea. So you know.

Phase 3 User Study 3

I don't know what they're trying to sell me.

Phase 1 User Study 3

I was just looking for what you were telling me to look for - Edit field.

-Question the authenticity of the product (2)

Phase 2 User Study 3

And my cynical mind knows that advertisers often greatly hype the benefits of their products to an extent as to render them almost untrue to get you to buy it.

Phase 2 User Study 3

So you question, the authenticity of the product

-ad biases against the product promoted (1)

Phase 2 User Study 3

Most often, yes. Because my assumption is, especially the more animated and excited, the voice actor who narrates the audio and advertisement is the more likely I am to think this is just another way to get me to spend more money.

Other influence of ads (0)

ads make apps intrusive (4)

Phase 1 User Study 5

I I don't like advertisements in apps, because then they they they seem they tend to get in my way.

Phase 2 User Study 1

This one (the second app) is definitely more fluid, this experience is definitely more fluid, because, there are, there are no ads in the way, you know, getting in the way of the experience.

 And, unfortunately, the inaccessibility of the ads in the first app rendered the entire experience much less desirable.

 I think with, you know, if they aren't ads, at least they might be less intrusive, hopefully.

Hide 3-button navigation (11)

[This ad hides the 3-button navigation(Back, Home, Recent App)]

 In addition, this ad hid the back button of her device.

[This ad hides the 3-button navigation(Back, Home, Recent App)]

[This ad hides the 3-button navigation(Back, Home, Recent App)]

[This ad hides the 3-button navigation(Back, Home, Recent App)]

[This ad hides the 3-button navigation(Back, Home, Recent App)]

 Yeah, but usually there's like the recent apps button, is there or something?

[This ad hides the 3-button navigation(Back, Home, Recent App)]

[This ad hides the 3-button navigation(Back, Home, Recent App)]

[This ad hides the 3-button navigation(Back, Home, Recent App)]

Phase 2 User Study 2

[This ad hides the 3-button navigation(Back, Home, Recent App)]

----Ad can degrade TalkBack performance (1)

Phase 2 User Study 4

Advertisements in general can result in talkback performance degrading drastically, depending on how they're laid out

Accessible ads (31)

Phase 3 User Study 3

There was nothing really annoying like last time.

Phase 3 User Study 2

Does so, goes past the add expense button, there is an accessible banner ad

Phase 3 User Study 2

Clicking on it pops up a new accessible interstitial ad, which he recognizes immediately, finds the close button and closes it]

Phase 3 User Study 1

[goes inside the food category, navigates and finds the accessible native ad]

Phase 3 User Study 4

Sure, but cose wise, I'd probably just do the free one because it was completely accessible, there weren't any problems with it.

Phase 3 User Study 4

[She opened the app, and she encountered an accessible interstitial ad.

Phase 3 User Study 5

An accessible native ad appeared right in the middle of the screen.

Phase 3 User Study 5

An accessible native ad appeared right in the middle of the screen.

Phase 3 User Study 5

When he created the first category, an accessible interstitial ad appeared again.

Phase 3 User Study 5

[He opened the app, and an accessible interstitial ad appeared in front of him.

Phase 3 User Study 4

An accessible native ad appeared right in the middle of the screen.

Phase 3 User Study 4

An accessible native ad appeared right in the middle of the screen.

Phase 3 User Study 4

While she was looking for a way to add income, She encountered an accessible banner ad.

Phase 3 User Study 4

When she created the first budget category, another accessible interstitial ad appeared.

Phase 3 User Study 2

Yes, they were. Yes, yes, very much so.

Phase 3 User Study 2

[Goes to the page, an accessible native ad appeared right in the middle of the screen.

Phase 3 User Study 2

[Goes to the details page where he encounters an accessible native ad in the middle of the screen]

Phase 3 User Study 2

[Opens the app and encounters the accessible interstitial ad]

Phase 3 User Study 1

I think so it's not something that like, I couldn't get over, but it definitely does add extra stuff to deal with.

Phase 3 User Study 1

[An accessible native ad appeared right in the middle of the screen.

Phase 3 User Study 1

[navigates the page and reaches the accessible bottom banner ad]

Phase 3 User Study 1

[clicks the add button and another accessible interstitial ad pops up]

Phase 3 User Study 1

[opens the app and the accessible interstitial ad pops up]

Phase 3 User Study 3

 yeah, I mean, I would certainly use the app, like even as is with like the way it is.

Phase 3 User Study 3

 They are definitely less intrusive.

Phase 3 User Study 3

 Well, I mean in a way they weren't too intrusive.

Phase 3 User Study 3

[An accessible native ad appeared right in the middle of the screen.

Phase 3 User Study 3

[goes past the accessible native ad (in the middle of the screen) to reach the transaction.

Phase 3 User Study 3

[Another accessible interstitial ad appeared.

Phase 3 User Study 3

[he proceeds to explore the whole page, finding the accessible bottom banner ad]

Phase 3 User Study 3

[opens the app which pops up the accessible interstitial ad]

Clear label (9)

Phase 3 User Study 3

 Again, the close button is clearly labeled (announced as close ad) so he closed it easily.

Phase 3 User Study 2

[Navigates through the ad, past buttons like "mute ad", "report ad" and then finding "close ad".

Phase 3 User Study 4

 Again, the close button is clearly labeled (announced as close ad), so she closed it easily.

Phase 3 User Study 4

 The close button of this ad is clearly labeled.

Phase 3 User Study 5

 The close button is still clearly labeled.

Phase 3 User Study 5

 This interstitial ad is clearly labeled, including the close button (announced as close ad button), so he was able to close the ad.

Phase 3 User Study 2

 I feel it's pretty easy to navigate if the developer of the app implements close ad button in the actual advertisement, you know, like, in the actual app itself.

Phase 3 User Study 1

 So it looks like there's a close ad control.

Phase 2 User Study 2

The close button of the advertisement was announced as "Interstitial close button button"

----easily recognize and close ad (14)

Phase 3 User Study 3

 Again, the close button is clearly labeled (announced as close ad) so he closed it easily.

Phase 3 User Study 3

So there's some like sponsored stuff. But it's at the bottom, right? So it's like not really in the middle of anything right now.

Phase 3 User Study 3

[Navigates the ad page until he finds the close button, which he selects to close the ad]

Phase 3 User Study 2

Because it said TextNow. I was like, okay, that's definitely an ad, because that's not a part of this app.

Phase 3 User Study 2

[Does so, goes past the add expense button, there is an accessible banner ad. Finds a button regarding ads and quickly goes back and ends navigation]

Phase 3 User Study 2
Clicking on it pops up a new accessible interstitial ad, which he recognizes immediately, finds the close button and closes it]

Phase 3 User Study 2
[Navigates through the ad, past buttons like "mute ad", "report ad" and then finding "close ad".

Phase 3 User Study 1
[goes inside the food category, navigates and finds the accessible native ad]

Phase 3 User Study 1
So I'm at some ads. So I'm gonna get past it.

Phase 3 User Study 1
So it looks like there's another ad that popped up. So I'm gonna close it.

Phase 3 User Study 1
So it looks like there's a close ad control. I wanna close that. Okay.

Phase 3 User Study 4
Again, the close button is clearly labeled (announced as close ad), so she closed it easily.

Phase 3 User Study 5
He successfully passed the native ad and went directly to the button for adding a budget plan.

Phase 3 User Study 4
She closed the ad easily.

-- will use app with ads (2)

Phase 3 User Study 4
Sure, but cose wise, I'd probably just do the free one because it was completely accessible, there weren't any problems with it.

Phase 3 User Study 3
yeah, I mean, I would certainly use the app, like even as is with like the way it is.

-- not too intrusive (6)

Phase 3 User Study 3

There was nothing really annoying like last time.

Phase 2 User Study 4

No, it was not because it was at the end of the page.

Phase 3 User Study 2

Yes, they were. Yes, yes, very much so.

Phase 3 User Study 1

I think so it's not something that like, I couldn't get over, but it definitely does add extra stuff to deal with.

Phase 3 User Study 3

They are definitely less intrusive.

Phase 3 User Study 3

Well, I mean in a way they weren't too intrusive.

noticing ads (9)

Phase 2 User Study 3

Ahh we have a video ad.

Phase 2 User Study 3

Not at this point?

Phase 2 User Study 3

Yes, there was an embedded ad, it would appear.

Phase 2 User Study 3

it could be, maybe this is an advertisement.

Phase 1 User Study 3

I think this is an ad?

Phase 2 User Study 3

Yes.

yeah, there's it. It sounds like they want you to create an account to allow features.

I'm not sure that it made a sound effect. I'm guessing it wants to let me know that it is opened. I'm not sure what that was.

So well, then I'm guessing. That's probably your list. Or you could make the list that way. I'm not sure.

-Expect ad content to appear after the actual app content (7)

Well, I thought, I'm used to advertisements that are on the end of the, or at the right edge of the app, so that's why I started to navigate back when I encountered [the ad].

As soon as he realized this was an advertisement, he started navigating back to the top of the app screen.

As soon as she heard TalkBack announce "Unlabeled", she started to navigate back to the top of the screen to find the button.

My hope was that possibly the navigating back might bring to focus the actual transactions, and that maybe the ad devs inserted a coding error to try and force me to focus on the ad, and that maybe the information was previous to the ad.

As soon as she interacted with the ad, she started to navigate back.

She thought the button for adding a plan should be placed before the advertisement.

My hope was that it was a dynamic and navigating back would make it either disappear or change location to below where the content I wanted to see was.

Differentiate the app and the ads (6)

Phase 3 User Study 2

You know. there was some ads that covered both the top and bottom half of the screen. And so it's hard to tell sometimes. Okay, which is the app and which is the ad

Phase 3 User Study 3

So I was using like Snapchat just for a test, right like, I don't actually use Snapchat, but I don't, and like I have no idea I had no idea where anything on the snapshot screen was right like it's just anything, and I don't know but you know it didn't help that. A lot of their features didn't have like understandable text labels. And so it was just like going through stuff. And like, you know, for all I know, any of that could have been in part of an ad, or it could have been part of the app like there was no way of knowing

Phase 2 User Study 3

I wasn't entirely sure what those were, and that was a concern, because at first I wondered if there were unlabeled buttons within the app.

Phase 2 User Study 3

it could be, maybe this is an advertisement. But obviously my assumption is that at this point I'm not going to be creating an account to use this app.

Phase 1 User Study 3

It doesn't tell me that it's you know I didn't know it was an advertisement, and since I don't know the app, I didn't know if it was the app actually doing it, or if it was an advertisement doing it.

Phase 2 User Study 3

I'm guessing that the the content of this advertisement is misleading where you can't really be sure if it is an ad, or if it's part of the app.

Interviewee: Yeah it really is.

----Failed to recognize the ad format (1)

Phase 3 User Study 5

Yeah, because I got to the bottom and heard it start talking about the Zoom content, and so my assumption was, this is full screen, and that the controls would be at the top.

--Thought it's an interstitial ad (1)

Phase 3 User Study 3

I was thinking there would be a close button again.

- Thought the ad is the app's feature (1)

Phase 2 User Study 3

I would assume it would be

describes inaccessibilities of ad without recognizing (3)

Phase 2 User Study 2

[he did not recognize this advertisement, but he mentioned it did cause confusion to him.

Phase 1 User Study 2

So my default assumption is that there are buttons that are contained within the app that perform various app functions.

Phase 1 User Study 2

No.

Thought the ad had disappeared (1)

Phase 2 User Study 2

[After he returned from the Google Play store, he thought the advertisement disappeared and said "There we go.

recognizes ad (63)

Phase 2 User Study 1

So it opened up a WebView and there is an advertisement.

Phase 2 User Study 3

Oh dear, there's a webview. That's obviously an ad.

Phase 3 User Study 2

[Does so, goes past the add expense button, there is an accessible banner ad. Finds a button regarding ads and quickly goes back and ends navigation]

Phase 3 User Study 1

So I'm at some ads. So I'm gonna get past it.

Phase 3 User Study 1

So it looks like there's another ad that popped up. So I'm gonna close it.

Phase 2 User Study 1

 As soon as he realized this was an advertisement, he started navigating back to the top of the app screen.

Phase 3 User Study 5

 And we had another ad, the ad blocked my ability to understand the app content.

Phase 2 User Study 5

 She recognized it immediately.

Phase 1 User Study 5

 Oh no <laughs> I hate these ads.

Phase 1 User Study 5

 This time they skip the products and go to the close button]

Phase 1 User Study 5

 you know, it was just the basic things I could do, and then it had some advertisement which I was able.

Phase 2 User Study 4

 So we do have advertising here.

Phase 2 User Study 4

 There's the advertisement right after the add expense button.

Phase 2 User Study 4

 And we have another advertisement.

Phase 2 User Study 4

 And I believe this is an advertisement.

Phase 3 User Study 4

 TalkBack announced the native ad as 'Ad View'. She was able to recognize that an ad was in front of her.

Phase 2 User Study 5

 She recognized it as an advertisement, but she had no idea what the advertisement tried to advertise for.

Phase 2 User Study 4

[Goes to the food category, this time he recognizes the ad]

Phase 2 User Study 4

so I believe it just opened. And I believe this is an advertisement.

Phase 1 User Study 4

Another video.

Phase 1 User Study 4

So it popped up a video ad.

Phase 1 User Study 4

[immediately realizes it's the ad after pressing the add button.

Phase 1 User Study 4

So this is like an ad.

Phase 1 User Study 4

[goes over a native ad with unlabeled elements and ineffective action (OPEN Button), realizes at the line "install Flood-it app for free"]

Phase 1 User Study 4

I don't think so. It's just sound. I think it's a casino ad or something. And I can't close it.

Phase 1 User Study 4

Oh this is an ad, okay.

Phase 3 User Study 2

[correctly navigates to points where the ad starts and ends]

Phase 3 User Study 2

And I'm guessing you realize that there was an ad (banner ad) after the add expense button.
Interviewee: Yes, yes, I did.

Phase 3 User Study 2

And I'm guessing you realize that there was an ad (banner ad) after the add expense button.

Phase 3 User Study 1

So there's an ad that I got past.

Phase 3 User Study 1

So I'm at some ads.

Phase 3 User Study 3

So there's some like sponsored stuff.

Phase 3 User Study 3

yeah. So it took me a second. I didn't like that it was like, asking me to sign up. It didn't do that before. Then I realized, oh, wait! It's for the ad. And then there was the the close button, right? So I'm just like, yeah, I'm gonna hit that because I want this screen. Right? So yeah.

Phase 3 User Study 3

It was an ad for something.

Phase 3 User Study 3

So there's some like sponsored stuff. But it's at the bottom, right?

Phase 2 User Study 3

Ahh we have a video ad.

Phase 2 User Study 3

Yes, there was an embedded ad, it would appear.

Phase 2 User Study 3

it could be, maybe this is an advertisement.

Phase 1 User Study 3

[She noticed the current page was an advertisement as TalkBack explicitly announced "ad" to her]

Phase 1 User Study 3

This time, She closed the ad very quick by swiping right multiple times to get to the close button.

Phase 1 User Study 3

I think this is an ad?

Phase 2 User Study 3

Yes.

[Phase 1 User Study 2](#)

oh oh, we have another ad.

[Phase 1 User Study 2](#)

Oh, dear, we have an ad

[Phase 3 User Study 2](#)

Okay another ad.

[Phase 3 User Study 1](#)

So it looks like there's another ad that popped up.

[Phase 2 User Study 2](#)

I saw another advertisement that I clicked through it and closed it

[Phase 2 User Study 1](#)

There is an ad.

[Phase 2 User Study 1](#)

So I found an ad right there in the middle of the page

[Phase 2 User Study 1](#)

So I found an ad right there in the middle of the page, you know, it broke the flow of the reading, it broke my flow because I literally have to swipe 6 times in order to get to the actual list of expenses.

[Phase 2 User Study 1](#)

I did not know it existed until I explored the screen.

[Phase 2 User Study 1](#)

And there's an advertisement.

[Phase 2 User Study 1](#)

I see an advertisement.

[Phase 2 User Study 1](#)

So there's an ad in the way, so let me close this.

Phase 1 User Study 2

It would appear this ad is taking out the entirety of what I can see.

Phase 1 User Study 1

No, I'm on another ad

Phase 2 User Study 2

It seems, okay, I mean, I don't know, I saw another advertisement that I clicked through it and closed it, and now it seems to be asking for information about the budget plan that I want to create.

Phase 2 User Study 1

I think it's displayed at the bottom of the page.

Phase 2 User Study 1

I think this is just an embedded advertisement because I still see the more options button, I still see the categories, the title from the app. I still see the main drawer, the main menu.

Phase 1 User Study 2

Once He realized there was an advertisement in front of him

Phase 1 User Study 1

Realizes it's the ad immediately and swipes back to exit the ad and enter the file creation page]

Phase 1 User Study 1

trying to get out of the advertisement.

Phase 1 User Study 1

I think it's perhaps like an advertisement to install some of their stuff.

Recognize the ad format (17)

Phase 3 User Study 4

I'm assuming, I'm not sure if it's in the middle or towards the bottom because with the Zoom being in my way, I'm not sure if I'm totally at the bottom of the screen, so I would say, lower middle or bottom of the screen, one of the 2.

Phase 2 User Study 4

It's playing it's playing audio.

Phase 2 User Study 4

 So it's actually taking up the entire screen for me.

Phase 2 User Study 4

There's the advertisement right after the add expense button.

Phase 1 User Study 4

 Another video.

Phase 1 User Study 4

 So it popped up a video ad.

Phase 3 User Study 2

 [correctly navigates to points where the ad starts and ends]

Phase 3 User Study 3

But it's at the bottom, right? So it's like not really in the middle of anything right now.

Phase 3 User Study 3

So there's some like sponsored stuff. But it's at the bottom, right?

Phase 2 User Study 3

 Ahh we have a video ad.

Phase 2 User Study 3

 Yes, there was an embedded ad, it would appear.

Phase 3 User Study 1

 I think it's full screen

Phase 2 User Study 1

 So I found an ad right there in the middle of the page, you know, it broke the flow of the reading, it broke my flow because I literally have to swipe 6 times in order to get to the actual list of expenses.

Phase 2 User Study 1

 I think this is just an embedded advertisement because I still see the more options button, I still see the categories, the title from the app.

Phase 3 User Study 1

But there was a close button, or there was a close ad control. So that's kind of one of the clues that I might make it that way.

Phase 2 User Study 1

I think it's displayed at the bottom of the page.

Phase 2 User Study 1

I think this is just an embedded advertisement because I still see the more options button, I still see the categories, the title from the app. I still see the main drawer, the main menu.

Failed to recognize the ad (23)

Phase 3 User Study 5

He didn't notice there was an ad at the bottom of the screen.

Phase 2 User Study 5

No, I didn't notice it was there.

Phase 2 User Study 5

[She did not realize an advertisement appeared in front of her.

Phase 1 User Study 5

I'm not sure <laughs> I couldn't see anything, as in there was nothing there. Then I was looking for the back button then it stopped screen share.

Phase 2 User Study 4

I did not.

Phase 2 User Study 4

[Explores the page, navigating the unlabeled banner ad (appeared right in the middle of the screen), but did not remark on it]

Phase 2 User Study 5

No, I didn't notice it was there.

Phase 2 User Study 5

She did not realize an advertisement appeared in front of her.

Phase 1 User Study 5

that one was silent. Yeah, in fact, I didn't even know it was a video. If you didnt tell me I would have had no idea

Phase 1 User Study 4

And I'm not really really sure what the context is here.

Phase 3 User Study 2

No, I didn't know

Phase 3 User Study 2

I think you've gone through it once when you were trying to explore by touch. Did you realize at that time?

Interviewee: No, I didn't know

Phase 1 User Study 3

She passed the native ad again and still TalkBack announced "Unlabeled" to her. Continue exploring, she also passed the "Create a new file/folder button"

Phase 2 User Study 3

Not at this point?

Phase 1 User Study 3

I don't know if it's wanting me to, if there's like an advertisement there, and it's wanting me to install a special specific app that's listed because I didn't really, wasn't paying attention to those.

Phase 1 User Study 3

But at this point I have no clue. So it's, I don't understand the layout at this point.

Phase 2 User Study 3

yeah, there's it. It sounds like they want you to create an account to allow features.

Phase 1 User Study 3

I'm not sure that it made a sound effect. I'm guessing it wants to let me know that it is opened. I'm not sure what that was.

Phase 1 User Study 3

So well, then I'm guessing. That's probably your list. Or you could make the list that way. I'm not sure.

Phase 1 User Study 1

perhaps I didn't really pay too much attention to it?

Phase 2 User Study 2

[he did not recognize this advertisement, but he mentioned it did cause confusion to him.

Phase 1 User Study 2

I wasn't entirely sure what they were since I'm not familiar with the app, I'm not sure.

Phase 1 User Study 2

[He passed through the native ad; it didn't catch his attention.

mistakes second ad page for different ad (2)

Phase 3 User Study 2

And also I guess that also attributes to the fact that it was actually the same ad, but different screens.

Phase 3 User Study 2

Okay another ad.

did not know ad existed (2)

Phase 2 User Study 2

When he explored the whole page, he didn't find that advertisement.

Phase 2 User Study 1

Honestly, no, I didn't. I did not know it existed until I explored the screen.

how they recognized ad (59)

Phase 2 User Study 1

Via the bunch of numbers and letters (the link for the image) and it also was a WebView.

Phase 2 User Study 1

So it opened up a WebView and there is an advertisement.

Phase 2 User Study 3

When I did hear the word web view I immediately backtracked, because my natural assumption, based on my previous experiences with this app was that that web view contained an advertisement.

Phase 2 User Study 3

Oh dear, there's a webview. That's obviously an ad.

Phase 1 User Study 5

Well it said something about products. Then there's something here that says install. Also wants me to install something else I'm not really sure what it is. But there's all these product things I guess those are ads too

Phase 1 User Study 5

because it wanted me to install some app. And it said, install on Google play and then I could tap the button, and it would install it. Or it would bring me to the store or something.

Phase 3 User Study 5

And we had another ad, the ad blocked my ability to understand the app content.

Phase 2 User Study 5

She recognized it immediately.

Phase 2 User Study 5

Yeah, it's a bunch of numbers.

Phase 2 User Study 5

Well, I kind of got the feeling it was, because, you know, it was saying something about a playbook, and that's something about getting the ebook.

Phase 1 User Study 5

Oh no <laughs> I hate these ads.

Phase 1 User Study 5

This time they skip the products and go to the close button]

Phase 1 User Study 5

Then there's something here that says install.

Phase 1 User Study 5

because it wanted me to install some app.

Phase 3 User Study 4

TalkBack announced the native ad as 'Ad View'. She was able to recognize that an ad was in front of her.]

Phase 2 User Study 4

Oh, oh. So this actually removed my ability to go back. It's playing it's playing audio.

Phase 2 User Study 4

Once again, a webview.

Phase 2 User Study 4

And you can recognize it because it was announced as a webview.

Phase 2 User Study 4

I heard Talkback say webview.

Phase 2 User Study 4

So Talk back read out web view, which to my mind, reads as an advertisement.

Phase 3 User Study 5

TalkBack announced the native ad as 'Ad View'.

Phase 3 User Study 4

TalkBack announced the native ad as 'Ad View'. She was able to recognize that an ad was in front of her.

Phase 2 User Study 5

Yeah, it's a bunch of numbers. I don't even know what it's for. I wouldn't even have any idea.

Phase 2 User Study 5

Well, I kind of got the feeling it was, because, you know, it was saying something about a playbook, and that's something about getting the ebook.

Phase 1 User Study 4

[immediately realizes it's the ad after pressing the add button.

Phase 1 User Study 4

[goes over a native ad with unlabeled elements and ineffective action (OPEN Button), realizes at the line "install Flood-it app for free"]

Phase 1 User Study 4

There's an ad app icon and at first I thought it was saying like, add something.

Phase 1 User Study 4

There's an ad app icon and at first I thought it was saying like, add something. And then it kept saying, app is free.

Phase 3 User Study 2

Because it said TextNow.

Phase 3 User Study 2

Because it said mute ad and then I closed the ad.

Phase 3 User Study 1

No, It was just from the text of the app that I realized it was an ad.

Phase 3 User Study 1

[Interviewee bypassed the native ad quickly without hearing the TalkBack announcement and located the button to create the budget plan.

Phase 3 User Study 1

So there is a "report", there's like a "sponsored". There's something that says "sponsored". So I'm just gonna skip past it.

Phase 3 User Study 3

yeah. So it took me a second. I didn't like that it was like, asking me to sign up. It didn't do that before. Then I realized, oh, wait! It's for the ad. And then there was the the close button, right? So I'm just like, yeah, I'm gonna hit that because I want this screen. Right? So yeah.

Phase 1 User Study 3

You know, I kind of did, the name of it at the top, that's not the Markor name, so I think it's an advertisement, but I'm not positive.

Phase 1 User Study 3

Just because the way it's saying products, image and stuff.

Phase 2 User Study 3

Ahh we have a video ad.

Phase 2 User Study 3

I could tell based on the information talk back provided me that it was an ad for another, my guess is competing money app, and it sounds like a dating app as well.

Phase 2 User Study 3

it could give it away.

Phase 1 User Study 3
[She noticed the current page was an advertisement as TalkBack explicitly announced "ad" to her]

Phase 1 User Study 3
This time, She closed the ad very quick by swiping right multiple times to get to the close button.

Phase 2 User Study 3
[Navigates through the page seamlessly, over the native ad as well]

Phase 2 User Study 3
Upon going back to the page, the native ad pops up again but he navigates through it without problem, despite the unlabeled buttons]

Phase 3 User Study 2
So you are kind of familiar with the pattern of opening an app and then an ad popping up the filling whole screen before you can see the app itself

Phase 1 User Study 2
I believe this is an ad, most likely, because it's playing a video or audio.

Phase 1 User Study 2
I've seen a lot of images, I would assume they are the screenshots of the app because I noticed later on down, there was an install button.

Phase 3 User Study 2
I realized that it was an ad, because it's said rocket money

Phase 3 User Study 1
But there was a close button, or there was a close ad control.

Phase 3 User Study 1
So it looks like there's a close ad control.

Phase 2 User Study 2
Yeah, I guess so, I mean, it kind of signifies to me that that's what it is.

Phase 2 User Study 2

I'm not sure, I guess, again, it just not really what I was expecting. I didn't really expect to see that, so.

Phase 2 User Study 2

So, well, I opened it for the first time, and nothing spoke, and normally the navigation drawer is sort of around the top left somewhere, and that didn't happen, and as I was moving through it was just saying, a bunch of gibberish like, like basically development tags for whatever. I kinda, it took a second, and I'm like, yeah, this is probably another ad thing. So I went to the bottom, and it says interstitial close, which is how I guess it defines some of these. I've seen that before, like in my transit app, sometimes that happens, and it's like there's nothing there doesn't seem to be anything useful on the screen at all. And it's just that interstitial close is what you need to hit so as soon as I hit that, it was right on the navigation, for where it was supposed to be.

Phase 2 User Study 1

I noticed that there was an advertisement and it said Flood-It!, it said Install, it said Google Play

Phase 1 User Study 2

[Once He realized there was an advertisement in front of him

Phase 1 User Study 2

 Right at the top, it mentions temu or team viewer or something along those lines, and I'm assuming that's the name of the app that is trying to advertise.

Phase 1 User Study 1

 The sounds.

Phase 1 User Study 1

 Realizes it's the ad immediately and swipes back to exit the ad and enter the file creation page]

Phase 1 User Study 1

 No, I had to figure it out from just the different clues on the page.

Phase 1 User Study 1

Lots of images. And then of course there's like an install button. It indicates, kind of, maybe you know it wants you to download something else.

MediaView (1)

Phase 3 User Study 2

 So media view thing made you aware that, "Okay, maybe this is not something (related to the app) and then the TextNow or the ad Icon confirmed it.

-Recognize the ad through the WebView (10)

Phase 2 User Study 1

Via the bunch of numbers and letters (the link for the image) and it also was a WebView.

Phase 2 User Study 1

So it opened up a WebView and there is an advertisement.

Phase 2 User Study 3

When I did hear the word web view I immediately backtracked, because my natural assumption, based on my previous experiences with this app was that that web view contained an advertisement.

Phase 2 User Study 3

Oh dear, there's a webview. That's obviously an ad.

Phase 2 User Study 4

Once again, a webview.

Phase 2 User Study 4

And you can recognize it because it was announced as a webview.

Phase 2 User Study 4

I heard Talkback say webview.

Phase 2 User Study 4

So Talk back read out web view, which to my mind, reads as an advertisement.

Phase 2 User Study 4

So Talk back read out web view, which to my mind, reads as an advertisement. Typically when I open an application and the first thing I see is talk back saying webview, that is a very high likelihood that there is an advertisement.

Phase 2 User Study 3

Oh dear, there's a webview. That's obviously an ad.

placement of ad on the screen (1)

Phase 3 User Study 2

And I'm guessing you realize that there was an ad (banner ad) after the add expense button.

Interviewee: Yes, yes, I did.

promotional text (7)

Phase 2 User Study 5

Well, I kind of got the feeling it was, because, you know, it was saying something about a playbook, and that's something about getting the ebook.

Phase 2 User Study 5

Well, I kind of got the feeling it was, because, you know, it was saying something about a playbook, and that's something about getting the ebook.

Phase 1 User Study 4

[goes over a native ad with unlabeled elements and ineffective action (OPEN Button), realizes at the line "install Flood-it app for free"]

Phase 1 User Study 4

There's an ad app icon and at first I thought it was saying like, add something. And then it kept saying, app is free.

Phase 3 User Study 1

No, It was just from the text of the app that I realized it was an ad.

Phase 3 User Study 3

I didn't like that it was like, asking me to sign up. It didn't do that before. Then I realized, oh, wait! It's for the ad.

Phase 2 User Study 3

I could tell based on the information talk back provided me that it was an ad for another, my guess is competing money app, and it sounds like a dating app as well.

ad action control (8)

Phase 3 User Study 2

Because it said mute ad and then I closed the ad.

Phase 3 User Study 3

yeah. So it took me a second. I didn't like that it was like, asking me to sign up. It didn't do that before. Then I realized, oh, wait! It's for the ad. And then there was the the close button, right? So I'm just like, yeah, I'm gonna hit that because I want this screen. Right? So yeah.

Phase 3 User Study 3

 And then there was the the close button, right?

Phase 1 User Study 1

 And then we have an open button and a choices icon.

Phase 3 User Study 2

, and it said mute ad or unmute ad or something like that.

Phase 3 User Study 1

 But there was a close button, or there was a close ad control.

Phase 3 User Study 1

 So it looks like there's a close ad control.

Phase 2 User Study 2

 Yeah, I guess so, I mean, it kind of signifies to me that that's what it is.

nothing useful other than close button (1)

Phase 2 User Study 2

it's like there's nothing there doesn't seem to be anything useful on the screen at all. And it's just that interstitial close is what you need to hit so as soon as I hit that, it was right on the navigation, for where it was supposed to be

unusual/unfamiliar layout (2)

Phase 2 User Study 2

I'm not sure, I guess, again, it just not really what I was expecting. I didn't really expect to see that, so.

Phase 2 User Study 2

normally the navigation drawer is sort of around the top left somewhere, and that didn't happen

"Google Play" (3)

Phase 1 User Study 5

because it wanted me to install some app. And it said, install on Google play and then I could tap the button, and it would install it. Or it would bring me to the store or something.

Phase 1 User Study 5

 because it wanted me to install some app.

Phase 2 User Study 1

I noticed that there was an advertisement and it said Flood-It!, it said Install, it said Google Play

random numbers and letters (4)

Phase 2 User Study 1

 Via the bunch of numbers and letters (the link for the image) and it also was a WebView.

Phase 2 User Study 5

 Yeah, it's a bunch of numbers.

Phase 2 User Study 5

Yeah, it's a bunch of numbers. I don't even know what it's for. I wouldn't even have any idea.

Phase 2 User Study 2

as I was moving through it was just saying, a bunch of gibberish like, like basically development tags for whatever. I kinda, it took a second, and I'm like, yeah, this is probably another ad thing

TalkBack announcement (6)

Phase 3 User Study 5

 And we had another ad, the ad blocked my ability to understand the app content.

Phase 3 User Study 4

TalkBack announced the native ad as 'Ad View'. She was able to recognize that an ad was in front of her.]

Phase 3 User Study 5

 TalkBack announced the native ad as 'Ad View'.

Phase 3 User Study 4

TalkBack announced the native ad as 'Ad View'. She was able to recognize that an ad was in front of her.

Phase 1 User Study 3

[She noticed the current page was an advertisement as TalkBack explicitly announced "ad" to her]

So, well, I opened it for the first time, and nothing spoke, and normally the navigation drawer is sort of around the top left somewhere, and that didn't happen, and as I was moving through it was just saying, a bunch of gibberish like, like basically development tags for whatever.

audio (6)

Oh no <laughs> I hate these ads.

Oh, oh. So this actually removed my ability to go back. It's playing it's playing audio.

Ahh we have a video ad.

I believe this is an ad, most likely, because it's playing a video or audio.

Many times, they are severely inaccessible, many times, ads consist of a video with only visual content and little to no auditory content where I have no idea what it's advertising, because all this is playing is music, whereas it maybe showing clever animations.

The sounds.

"lots of images" (3)

Just because the way it's saying products, image and stuff.

I've seen a lot of images, I would assume they are the screenshots of the app because I noticed later on down, there was an install button.

Lots of images. And then of course there's like an install button. It indicates, kind of, maybe you know it wants you to download something else.

context clues (11)

So media view thing made you aware that, "Okay, maybe this is not something (related to the app) and then the TextNow or the ad Icon confirmed it.

Because it said TextNow. I was like, okay, that's definitely an ad, because that's not a part of this app.

Well it said something about products. Then there's something here that says install. Also wants me to install something else I'm not really sure what it is. But there's all these product things I guess those are ads too

Then there's something here that says install.

because it wanted me to install some app.

There's an ad app icon and at first I thought it was saying like, add something.

So there is a "report", there's like a "sponsored". There's something that says "sponsored". So I'm just gonna skip past it.

yeah. So it took me a second. I didn't like that it was like, asking me to sign up. It didn't do that before. Then I realized, oh, wait! It's for the ad. And then there was the the close button, right? So I'm just like, yeah, I'm gonna hit that because I want this screen. Right? So yeah.

Just because the way it's saying products, image and stuff.

Right at the top, it mentions temu or team viewer or something along those lines, and I'm assuming that's the name of the app that is trying to advertise.

No, I had to figure it out from just the different clues on the page.

install button (4)

Phase 1 User Study 2

 I've seen a lot of images, I would assume they are the screenshots of the app because I noticed later on down, there was an install button.

Phase 2 User Study 1

I noticed that there was an advertisement and it said Flood-It!, it said Install, it said Google Play

Phase 2 User Study 1

As it said when I swiped to the right, I'm sorry, when I explored by touch at the bottom, you know, I noticed that there was an advertisement and it said Flood-It!, it said Install, it said Google Play. And so I realized that, okay, that's definitely an advertisement right there.

Phase 1 User Study 1

Lots of images. And then of course there's like an install button. It indicates, kind of, maybe you know it wants you to download something else.

recurrence (11)

Phase 2 User Study 5

 She recognized it immediately.

Phase 1 User Study 5

 This time they skip the products and go to the close button]

Phase 1 User Study 4

[immediately realizes it's the ad after pressing the add button.

Phase 3 User Study 1

[Interviewee bypassed the native ad quickly without hearing the TalkBack announcement and located the button to create the budget plan.

Phase 1 User Study 3

 This time, She closed the ad very quick by swiping right multiple times to get to the close button.

Phase 2 User Study 3

[Navigates through the page seamlessly, over the native ad as well]

Phase 2 User Study 3

Upon going back to the page, the native ad pops up again but he navigates through it without problem, despite the unlabeled buttons]

Phase 3 User Study 2

So you are kind of familiar with the pattern of opening an app and then an ad popping up the filling whole screen before you can see the app itself

Phase 1 User Study 2

[Once He realized there was an advertisement in front of him

Phase 1 User Study 2

Once He realized there was an advertisement in front of him

Phase 1 User Study 1

Realizes it's the ad immediately and swipes back to exit the ad and enter the file creation page]

product name (7)

Phase 3 User Study 2

Because it said TextNow.

Phase 1 User Study 3

You know, I kind of realize by the name of [the ad] at the top, that's not the Markor name, so I think it's an advertisement.

Phase 2 User Study 3

I could tell based on the information talk back provided me that it was an ad for another, my guess is competing money app, and it sounds like a dating app as well.

Phase 2 User Study 3

it could give it away.

Phase 3 User Study 2

I realized that it was an ad, because it's said rocket money

Phase 2 User Study 1

I noticed that there was an advertisement and it said Flood-It!, it said Install, it said Google Play

 Right at the top, it mentions temu or team viewer or something along those lines, and I'm assuming that's the name of the app that is trying to advertise.

how they close an ad (50)

 Again, the close button is clearly labeled (announced as close ad) so he closed it easily.

[Navigates the ad page until he finds the close button, which he selects to close the ad]

 he used backward navigation (Swipe left) to locate the close button of the advertisement.

 So I'm gonna have to go through like we did either, well, with the back arrow, or go and close the app[ad] down and see if I can get past.

 Most of them are cumbersome to use, particularly because they trap, they sometimes trap you in a WebView and you can't get out of it by standard TalkBack back gestures.

 She managed to close the advertisement by clicking on the back button located at the bottom of her device Time- 43:16]

[presses the back button which successfully closed the ad]

 So I'm gonna touch on the back button.

 I'm gonna tap the back button.

It's not working.

Phase 3 User Study 4

Again, the close button is clearly labeled (announced as close ad), so she closed it easily.

Phase 3 User Study 5

The close button is still clearly labeled.

Phase 3 User Study 5

This interstitial ad is clearly labeled, including the close button (announced as close ad button), so he was able to close the ad.

Phase 1 User Study 5

This time they skip the products and go to the close button]

Phase 1 User Study 5

[closes the ad, opening the new file creation pop up]

Phase 3 User Study 4

She closed the ad easily.

Phase 2 User Study 4

at this point I would probably force close it and try again.

Phase 2 User Study 4

I can try using a talkback back gesture to navigate up.

Phase 2 User Study 4

[closes the ad]

Phase 2 User Study 5

She closed the ad through the ad-close button.

Phase 2 User Study 5

She clicked that unlabeled close button, which is announced as "button".

Phase 1 User Study 5

[tries the back gesture]

Phase 1 User Study 5

yeah, actually, I did.

Phase 1 User Study 4

I would restart the app

Phase 1 User Study 4

There was a a close option near the bottom of the screen that I found, and quickly tapped it because I didn't want it to go to the play store.

Phase 1 User Study 4

[closes the ad with the close button

Phase 1 User Study 4

[explores by touch.

Phase 1 User Study 4

And I thought I had done that.

Phase 1 User Study 4

He presses the close button there and that closed the ad]

Phase 1 User Study 4

[closes the ad with the close button, opening the create note page]

Phase 1 User Study 4

explores by touch. Finds the close button, the install button

Phase 2 User Study 3

I would completely shut out, close the app and relaunch it.

Phase 2 User Study 3

He navigates through the ad, reaching the unlabeled button, which TalkBack recognizes as a close button.

Phase 1 User Study 3

So normally, I would just open it, and if I see, realize, oh, it's an ad, then I'd go to the bottom first and just touch and see if I find the close button, which I probably would.

Phase 1 User Study 3

I usually would probably close the app itself.

Phase 1 User Study 3

This time, She closed the ad very quick by swiping right multiple times to get to the close button.

Phase 1 User Study 3

[She found the close button and tapped on it.

Phase 2 User Study 3

So he presses it to close the ad]

Phase 1 User Study 3

Generally I try to see if I find the close button but in this situation

Phase 2 User Study 1

I would force closing the app, it would be my next option.

Phase 1 User Study 2

Oh, dear, I'm afraid the only way I know of at this point to X out of this ad is to close the app entirely and relaunch it.

Phase 1 User Study 2

[Then He clicked the close button to close that excessive number of swipes interstitial ad]

Phase 3 User Study 2

[Finds the close ad instantly and presses it.

Phase 3 User Study 2

and then finding "close ad". This closes the first page of the ad

Phase 3 User Study 1

[Finds the close button and closes it]

Phase 2 User Study 2

Yeah

Phase 2 User Study 1

he clicked on that button to exit out of the advertisement.

Phase 2 User Study 1

So there's an ad in the way, so let me close this.

Phase 1 User Study 1

I used the back gesture on [Talkback].

Phase 1 User Study 1

[back gestures, which opens up a close pop up. Finds the close button on it and exits the ad]

Back button (5)

Phase 1 User Study 3

So I'm gonna have to go through like we did either, well, with the back arrow, or go and close the app[ad] down and see if I can get past.

Phase 1 User Study 3

She managed to close the advertisement by clicking on the back button located at the bottom of her device Time- 43:16]

Phase 1 User Study 5

[presses the back button which successfully closed the ad]

Phase 2 User Study 4

So I'm gonna touch on the back button.

Phase 2 User Study 4

I'm gonna tap the back button.

restart app (15)

Phase 2 User Study 4

at this point I would probably force close it and try again.

Phase 1 User Study 4

I would restart the app

Phase 2 User Study 3

I would completely shut out, close the app and relaunch it.

Phase 1 User Study 3

 I usually would probably close the app itself.

Phase 2 User Study 3

 So what I'll do is close from my recent apps and try (to reopen).

Phase 2 User Study 2

 Luckily that's short, but that I still can't seem to get out of the thing and like I could, even if I close the app and reopen it somehow that could come back right.

Phase 2 User Study 2

 Yeah, but usually there's like the recent apps button, is there or something?

Phase 2 User Study 1

 You have to literally close the app, force closing it from the apps, you know, the overview slash app in order to get rid of the ad and go back to the app.

Phase 1 User Study 2

 Oh, dear, I'm afraid the only way I know of at this point to X out of this ad is to close the app entirely and relaunch it.

Phase 1 User Study 2

 Oh dear, this one even, when I tried to click on the WebView, it took me out of the app into the play store, trying to install something, again, looks as though I'm gonna have to close out of the app and relaunch.

Phase 2 User Study 1

 Yeah, restart it.

Phase 2 User Study 1

 Usually nine times out of ten, that fixes it.

Phase 2 User Study 1

You know, it's like that button, and you know it will close the ad. If not, then it'll probably open the play store, and I'll just close the play store app and you know, see if that dismisses the advertisement. If that fails, then I'll close off, force closing the app from the app overview.

Phase 2 User Study 2

 But it's not, it always makes everything difficult, and I don't know like there's probably something I'm missing, but right now, like I can't even figure out like the app won't even close properly and I'm sure like, if I restarted my phone, obviously it would close everything, and then I would have to restart Zoom again.

Phase 1 User Study 1

Would you consider restarting the app?

explore by touch (6)

Phase 1 User Study 5

This time they skip the products and go to the close button]

Phase 1 User Study 5

yeah, actually, I did.

Phase 1 User Study 4

[explores by touch.

Phase 1 User Study 4

explores by touch. Finds the close button, the install button

Phase 1 User Study 3

So normally, I would just open it, and if I see, realize, oh, it's an ad, then I'd go to the bottom first and just touch and see if I find the close button, which I probably would.

Phase 1 User Study 1

yeah, like, I mean, I end up doing a little bit of exploring by touch to basically see if I can move my talkback cursor to you know, close to where I need to go, and then swipe to find the button.

close button (39)

Phase 3 User Study 3

Again, the close button is clearly labeled (announced as close ad) so he closed it easily.

Phase 3 User Study 3

[Navigates the ad page until he finds the close button, which he selects to close the ad]

Phase 3 User Study 2

Clicking on it pops up a new accessible interstitial ad, which he recognizes immediately, finds the close button and closes it]

Phase 1 User Study 2

, he used backward navigation (Swipe left) to locate the close button of the advertisement.

[Phase 1 User Study 2](#)

 he used backward navigation (Swipe left) to locate the close button of the advertisement.

[Phase 1 User Study 3](#)

 So I'm gonna have to go through like we did either, well, with the back arrow, or go and close the app[ad] down and see if I can get past.

[Phase 3 User Study 4](#)

 Again, the close button is clearly labeled (announced as close ad), so she closed it easily.

[Phase 3 User Study 5](#)

 The close button is still clearly labeled.

[Phase 3 User Study 5](#)

 This interstitial ad is clearly labeled, including the close button (announced as close ad button), so he was able to close the ad.

[Phase 1 User Study 5](#)

 This time they skip the products and go to the close button]

[Phase 1 User Study 5](#)

[closes the ad, opening the new file creation pop up]

[Phase 3 User Study 4](#)

 She closed the ad easily.

[Phase 2 User Study 4](#)

[closes the ad]

[Phase 2 User Study 5](#)

 She closed the ad through the ad-close button.

[Phase 2 User Study 5](#)

 She clicked that unlabeled close button, which is announced as "button".

[Phase 1 User Study 4](#)

 There was a a close option near the bottom of the screen that I found, and quickly tapped it because I didn't want it to go to the play store.

Phase 1 User Study 4

[closes the ad with the close button

Phase 1 User Study 4

 He presses the close button there and that closed the ad]

Phase 1 User Study 4

[closes the ad with the close button, opening the create note page]

Phase 1 User Study 4

explores by touch. Finds the close button, the install button

Phase 2 User Study 3

 He navigates through the ad, reaching the unlabeled button, which TalkBack recognizes as a close button.

Phase 1 User Study 3

 So normally, I would just open it, and if I see, realize, oh, it's an ad, then I'd go to the bottom first and just touch and see if I find the close button, which I probably would.

Phase 1 User Study 3

 This time, She closed the ad very quick by swiping right multiple times to get to the close button.

Phase 1 User Study 3

[She found the close button and tapped on it.

Phase 2 User Study 3

 So he presses it to close the ad]

Phase 1 User Study 3

Generally I try to see if I find the close button but in this situation

Phase 1 User Study 1

 there's no close button.

Phase 1 User Study 2

[Then He clicked the close button to close that excessive number of swipes interstitial ad]

Phase 3 User Study 2

[Finds the close ad instantly and presses it.

Phase 3 User Study 2

and then finding "close ad". This closes the first page of the ad

Phase 3 User Study 1

[Finds the close button and closes it]

Phase 2 User Study 1

he clicked on that button to exit out of the advertisement.

Phase 2 User Study 1

So there's an ad in the way, so let me close this.

Phase 3 User Study 2

This closes the first page of the ad, but it has a second page]

Phase 3 User Study 1

[locates the close button and closes it]

Phase 2 User Study 2

Generally, though, it's not that difficult to close them like the first couple that came up, I just went right to the bottom, and there was a close button, so it was easy.

Phase 2 User Study 2

so he managed to close the advertisement]

Phase 2 User Study 1

but I think that's a close button

Phase 1 User Study 1

[back gestures, which opens up a close pop up. Finds the close button on it and exits the ad]

back gesture (10)

Phase 2 User Study 1

Most of them are cumbersome to use, particularly because they trap, they sometimes trap you in a WebView and you can't get out of it by standard TalkBack back gestures.

Phase 1 User Study 5

 It's not working.

Phase 2 User Study 4

 I can try using a talkback back gesture to navigate up.

Phase 1 User Study 5

[tries the back gesture]

Phase 1 User Study 4

 And I thought I had done that.

Phase 2 User Study 1

[he used the back gesture, still not working]

Phase 1 User Study 1

 So I'm trying the talkback back gesture again, and that doesn't seem to work.

Phase 1 User Study 1

 So I did the angle gesture: down and left.

Phase 1 User Study 1

 I used the back gesture on [Talkback].

Phase 1 User Study 1

[back gestures, which opens up a close pop up. Finds the close button on it and exits the ad]

accessibility issues (13)

Phase 2 User Study 3

[The add plan button shows up an excessive number of swipes interstitial ad with unlabeled close button.

Phase 2 User Study 3

[There is a unlabeled native ad with ineffective action(Install Button) on the page that He navigates through to reach the create new category button]

Phase 1 User Study 3

[The Unlocatable Rewarded Video ad appeared]

Phase 2 User Study 3

clicks on the plan which pops up the unlocatable button interstitial ad. It starts playing audio

Phase 2 User Study 3

 so there is an advertisement (unlabeled banner ad at the bottom of the screen) in this screen, and you have gone through it.

Phase 1 User Study 3

TalkBack can only focus on the WebView, the played video. None of the elements, including the install button for that advertisement, is locatable by using TalkBack.

Phase 1 User Study 1

[Presses the general button which displays the unlocatable interstitial ad, which plays a video]

Phase 1 User Study 1

[Only the ad WebView is focusable when using TalkBack]

Phase 1 User Study 1

[navigates and finds the search button, presses it, which then displays an unlocatable rewards ad]

Phase 1 User Study 1

which showed the excessive element ad. Realizes it's the ad immediately

Phase 1 User Study 1

[Goes on a native ad with unlabeled elements and ineffective action (OPEN Button)]

Phase 1 User Study 1

So there is an unlabeled button here. Talkback tried to OCR it, but it didn't really give a clear label what the button does.I'm gonna swipe right again. So we have a bunch of what appears to be text. I'm not sure if any of that is clickable or not. There's also another element that's unlabeled. So not very useful there.

Phase 1 User Study 1

So lots of images that don't really have any clear image descriptions. So just gonna swipe past those. it's saying, products 8, products 9. So yeah, not very useful. So those are all the images that I see. But I don't like there's no clear label or control of that indicates like, where to go to create a new note.

Excessive interactions (13)

Phase 2 User Study 5

When she clicked on the "Add Budget Plan Button", an excessive number of swipes interstitial ad with an unlabeled close button appeared.

Phase 1 User Study 5

The excessive element ad is shown]

Phase 1 User Study 4

Presses it and now it displays the excessive element ad]

Phase 1 User Study 3

[After pressing that button, an excessive number of swipe interstitial ad was in front of She]

Phase 2 User Study 3

[The add plan button shows up an excessive number of swipes interstitial ad with unlabeled close button.

Phase 1 User Study 3

The excessive number of swipe interstitial ads appeared again.

Phase 1 User Study 1

which showed the excessive element ad. Realizes it's the ad immediately

Phase 2 User Study 1

It's definitely an intrusive advertisement because of the fact that I have to swipe so many times in order to get from the advertisement and to the list.

Phase 2 User Study 1

he swiped 8 times to get out of this banner ad.

Phase 2 User Study 1

[After clicking "Add Budget Plan Button", an excessive number of swipes interstitial ad with an unlabeled button appeared.

Phase 1 User Study 2

[He passed through the native ad; it didn't catch his attention.

Phase 2 User Study 2

Upon clicking the "Add the budget plan button", an excessive number of swipes interstitial ad with unlabeled close button appeared.

[An excessive number of swipes interstitial ad is displayed in front of He again]

Ineffective action (10)

When she navigated to the "Create a new category button", a native ad with unlabeled buttons and ineffective action appeared.

[navigates to the unlabeled native ad with ineffective action(Install Button)]

[goes through the native ad with unlabeled elements and ineffective action (OPEN Button) on the page to reach the button]

[goes over a native ad with unlabeled elements and ineffective action (OPEN Button), realizes at the line "install Flood-it app for free"]

[She encountered a native ad with unlabeled elements and ineffective action (OPEN Button) on her way to the "Create a new file/folder button".

[There is a unlabeled native ad with ineffective action(Install Button) on the page that He navigates through to reach the create new category button]

[Goes on a native ad with unlabeled elements and ineffective action (OPEN Button)]

On his way to the button "Create a new category button", an unlabeled native ad with ineffective action(Install Button) appeared.

On his way to locating the create a new category button, a native ad with unlabeled elements and ineffective action (Install Button) appeared]

ineffective action

Overly accessible elements (3)

Phase 1 User Study 3

[Overly Accessible elements on the screen]

Phase 1 User Study 2

[Some overly accessible elements inside this ad]

Phase 1 User Study 2

There are also two overly accessible elements inside this native ad

unclear labels (2)

Phase 2 User Study 5

Yeah, it's a bunch of numbers. I don't even know what it's for. I wouldn't even have any idea.

Phase 1 User Study 1

But I don't like there's no clear label or control of that indicates like, where to go to create a new note.

unlabeled button (14)

Phase 2 User Study 4

[he navigates through all the elements again, skipping over the close button as it's unlabeled]

Phase 2 User Study 4

[Clicks the add button which opens an excessive number of swipes interstitial ad with unlabeled close button.

Phase 2 User Study 5

When she clicked on the "Add Budget Plan Button", an excessive number of swipes interstitial ad with an unlabeled close button appeared.

Phase 2 User Study 5

When she navigated to the "Create a new category button", a native ad with unlabeled buttons and ineffective action appeared.

Phase 2 User Study 5

[She opened the app, and an interstitial ad with an unlabeled close button appeared.

Phase 3 User Study 3

So I was using like Snapchat just for a test, right like, I don't actually use Snapchat, but I don't, and like I have no idea I had no idea where anything on the snapshot screen was right like it's just anything, and I don't know but you know it didn't help that. A lot of their features didn't have like understandable text labels. And so it was just like going through stuff. And like, you know, for all I know, any of that could have been in part of an ad, or it could have been part of the app like there was no way of knowing

Phase 2 User Study 3

[The add plan button shows up an excessive number of swipes interstitial ad with unlabeled close button.

Phase 2 User Study 3

[There is a unlabeled native ad with ineffective action(Install Button) on the page that He navigates through to reach the create new category button]

Phase 1 User Study 2

These unlabeled buttons are a bit of worried.

Phase 2 User Study 1

It was unlabeled, it's just like a button.

Phase 2 User Study 2

Upon clicking the "Add the budget plan button", an excessive number of swipes interstitial ad with unlabeled close button appeared.

Phase 2 User Study 1

[he opened the Money Manager app, and an unlabeled interstitial ad appeared in front of him]

Phase 1 User Study 2

unlabeled buttons

Phase 1 User Study 1

So there is an unlabeled button here.

unclear image descriptions (3)

Phase 1 User Study 4

But it's not helpful.

If I knew what the images were, probably, but at this point, I'd say, no, because I have no clue where the

So lots of images that don't really have any clear image descriptions.

unlabeled element (22)

[Explores the page, navigating the unlabeled banner ad (appeared right in the middle of the screen), but did not remark on it]

An unlabeled banner ad was placed in the middle of the screen.

An unlabeled banner ad was placed at the bottom of the screen.

[There was an unlabeled banner ad displayed at the bottom of the screen]

[navigates to the unlabeled native ad with ineffective action(Install Button)]

[goes through the native ad with unlabeled elements and ineffective action (OPEN Button) on the page to reach the button]

[goes over a native ad with unlabeled elements and ineffective action (OPEN Button), realizes at the line "install Flood-it app for free"]

[She encountered a native ad with unlabeled elements and ineffective action (OPEN Button) on her way to the "Create a new file/folder button".

Inside the category details, he navigates and finds an unlabeled banner ad in the middle of the screen, which is announced as a webview.

Phase 2 User Study 3

[There is a unlabeled native ad with ineffective action(Install Button) on the page that He navigates through to reach the create new category button]

Phase 1 User Study 3

[She encountered several unlabeled elements and images on the tutorial page]

Phase 2 User Study 3

 so there is an advertisement (unlabeled banner ad at the bottom of the screen) in this screen, and you have gone through it.

Phase 1 User Study 1

[Goes on a native ad with unlabeled elements and ineffective action (OPEN Button)]

Phase 2 User Study 1

[There was an unlabeled banner ad right in the middle of the page.

Phase 2 User Study 2

[On this page, there was an unlabeled banner ad displayed at the bottom of the screen.

Phase 2 User Study 2

[An unlabeled banner ad appeared right in the middle of the screen.

Phase 2 User Study 2

 On his way to the button "Create a new category button", an unlabeled native ad with ineffective action(Install Button) appeared.

Phase 2 User Study 1

[There was an unlabeled banner ad at the bottom of the screen, right after "Add Expense Button".

Phase 2 User Study 1

 On his way to locating the create a new category button, a native ad with unlabeled elements and ineffective action (Install Button) appeared]

Phase 1 User Study 2

he encountered a native ad with unlabeled elements

Phase 1 User Study 2

images

Phase 1 User Study 1

There's also another element that's unlabeled.

focusability issue (22)

Phase 2 User Study 4

[Selects the plan, which opens up the unlocatable element interstitial ad.

Phase 2 User Study 4

[Clicks the add button which opens an excessive number of swipes interstitial ad with unlabeled close button.

Phase 2 User Study 5

An unlocatable interstitial ad appeared.

Phase 1 User Study 5

[presses sort by option which shows the unlocatable rewards ad which played a video with audio]

Phase 1 User Study 5

[this opens the unlocatable interstitial ad]

Phase 1 User Study 4

[presses the general option and it pops up an unlocatable interstitial ad]

Phase 1 User Study 4

[presses the search button and it opens the an unlocatable rewards ad, which started playing video with audio]

Phase 1 User Study 3

[The Unlocatable Rewarded Video ad appeared]

Phase 1 User Study 3

None of the elements, including the install button for that advertisement, is locatable by using TalkBack.

Phase 1 User Study 3

[An unlocatable interstitial ad appeared, with video playing]

Phase 2 User Study 3

clicks on the plan which pops up the unlocatable button interstitial ad. It starts playing audio

Phase 1 User Study 3

TalkBack can only focus on the WebView, the played video. None of the elements, including the install button for that advertisement, is locatable by using TalkBack.

Phase 1 User Study 1

[Presses the general button which displays the unlocatable interstitial ad, which plays a video]

Phase 1 User Study 1

[Only the ad WebView is focusable when using TalkBack]

Phase 1 User Study 1

[navigates and finds the search button, presses it, which then displays an unlocatable rewards ad]

Phase 2 User Study 1

[After clicking the existing budget plan, an unlocatable interstitial ad appeared.

Phase 2 User Study 1

[Only the WebView of this advertisement is locatable by TalkBack]

Phase 1 User Study 1

When I explore the screen there's nothing there.

Phase 1 User Study 2

[Only the ad WebView is focusable when using TalkBack]

Phase 2 User Study 2

[An unlocatable interstitial ad appeared, and it was playing a video.

Phase 1 User Study 2

[After selecting the general option, an unlocatable interstitial advertisement appeared]

Phase 1 User Study 2

[After clicking the search button, an unlocatable rewarded advertisement appeared.

quotes/emotions (10)

Phase 2 User Study 3

Which is annoying to have to listen to.

Phase 2 User Study 3

 Plus, I also would be a little concerned that it might open an advertisement for that app in my Google Chrome Browser.

Phase 2 User Study 3

 And because of the inaccessibility of ads, and because of the annoyance of ads.

Phase 2 User Study 3

But the fact that the ad featured unlabeled buttons makes me still more concerned about what those buttons might do, what they open up, like Play Store page with another app. Where would those buttons take me anytime?

Phase 1 User Study 1

 Then that's you know, that make me really frustrated.

Phase 1 User Study 1

 for sure.

Phase 1 User Study 1

 But, like, if I had to use this app you know a lot, then that would probably irritate me a little bit.

Phase 1 User Study 1

 And also it's just when there is, you know, an advertisement, and you have to swipe through it or past it, it's really inconvenient, and it makes navigating the app way slower sometimes.

Phase 1 User Study 1

 the last one that we saw with the puzzle game, [because] I wasn't able to go out of that.

Phase 1 User Study 1

It definitely was annoying. But especially the, like going to the settings and then not being able to go out of that advertisement like that was definitely a blocker.

Desire proper labeling of the button (2)

Phase 2 User Study 1

 You know that there should be a button that says, close ad, skip ad or whatever, you know.

Phase 2 User Study 1

 But proper labeling of the button, you know, is always desirable.

Ads are annoying no matter your familiarity with TalkBack (1)

Phase 2 User Study 2

But, I don't know, I don't know that it really matters, honestly, like I mean, I mean not to say your question doesn't matter, but I don't think it really matters if I was more like, if I was really versed in TalkBack, I would probably still have the same annoyance with the ads that I do now

"-Bombarded with similar ads" (2)

Phase 2 User Study 3

But situations like that do concern me because I don't want the app store mistakenly assuming that I'm interested in this app just because some ad sent me to that web page or app store screen. I don't want them adding that to my search history as, "oh, he's interested in a gambling app." No, I'm not.

Phase 2 User Study 3

And then that would show up in my history, and I might be bombarded with similar ads for content.

-"not really what I'm looking for" (1)

Phase 1 User Study 3

If not, if it's not really what I'm looking for.

-- graphical ads are useless (1)

Phase 3 User Study 3

you know. And it's like part of that, you know the advertising again. Like, you know, you can't do anything online without being bombarded with ads, and that that wasn't how it was when I started. And the thing is like because I don't see pictures. And I don't see the you know, the cool new graphics and stuff like that. Like to me the Internet fundamentally in the way that I use it. It's not that different than it was like a long time ago, you know, like it's all still text.

It's like all those changes are just there for other people. It doesn't really benefit me a lot of the time, like, you know, it's just like all that, that the web is so much that's here now, and more complicated, and that I don't know. Like, it's yeah. It's it's it's interesting philosophically. Things have progressed in a lot of interesting ways. But I still a lot of time, you know, most of the time when I'm online, I just want to read something. If I just want to read something. That's all I want. I don't want want all this extra stuff.

----Expect to have a balance between the app and the ads (1)

Phase 2 User Study 4

But I do think that there is a fine balance to not have excessive ads. And to make the application usable with those ads.

----Feel it's exploitative when the subscription can only remove the ads (1)

Phase 2 User Study 4

I definitely feel like this is kind of exploiting, and then taking advantage of. I feel like this is taking advantage of people in a way, for sure, especially if the price of upkeep to remove advertising is excessively high versus other applications that do the same thing. If there are any, that is I am definitely willing to spend a certain amount every month for an application or service. If that application or service adds more value than just removing advertising, I'm not saying I'm completely against that business model. But to simply remove advertising is it's a little bit too exploitative, I guess, for me.

----"startling" (2)

Phase 2 User Study 5

This advertisement played a video, and it scared her.

Phase 2 User Study 5

I prefer it without because otherwise, you know, how am I going to get it down so I can hear my speech. And you know it's just kind of stressful, and that's kind of startling, too, because you're sitting there and all of a sudden, it woo woo woo, yeah, it's kind of startling.

"----More bearable" (1)

Phase 2 User Study 4

I don't want to use the phrase, more accessible I would probably use the term more bearable or more navigable.

----Can't accept (1)

Phase 2 User Study 4

Okay, now, what I think (is that) the screen just changed, because talk back just announced web view again without me touching the screen. No, I cannot accept this.

----Disruptive (1)

Phase 2 User Study 4

Oh okay that is very disruptive.

"--Don't benefit me" (1)

Phase 3 User Study 3

It's like all those changes are just there for other people. It doesn't really benefit me a lot of the time, like, you know, it's just like all that, that the web is so much that's here now, and more complicated, and that I don't know.

"--Just want to read something" (1)

Phase 3 User Study 3

But I still a lot of time, you know, most of the time when I'm online, I just want to read something. If I just want to read something. That's all I want. I don't want want all this extra stuff.

"-Fear" (1)

Phase 2 User Study 3

But I don't want to click that link for fear that it might open the Google play page for whatever app it's trying to advertise.

"-Grateful" (2)

Phase 3 User Study 5

I'm not sure where the control to close the ad is, but I am grateful that at least this ad didn't come up right away and interfere with adding expenses.

Phase 2 User Study 3

But I was grateful that at least it didn't hinder me from using the app.

-Feel nervous toward any unlabeled buttons (3)

Phase 3 User Study 4

But I'm very cautious about clicking the unlabeled buttons because you never know what you're clicking.

Phase 2 User Study 3

I wasn't entirely sure what those were, and that was a concern, because at first I wondered if there were unlabeled buttons within the app.

Phase 2 User Study 3

I see unable buttons of any kind. I feel nervous.

-Concerned about where the unlabeled buttons will take the user (6)

Phase 2 User Study 5

I don't like it because I mean you never know what it's gonna do. I mean, I could have pressed the button, and it could have brought me to a website, or you know, I could have done anything it could have brought me to a place where I needed to pay. I mean, that's it. You don't know what the button is going to do. It's not labeled, yeah.

Phase 3 User Study 4

But I'm very cautious about clicking the unlabeled buttons because you never know what you're clicking.

Phase 3 User Study 4

Yeah, because then I have to waste my time, trying to get out of the ad, closing the ad, not being sure what I clicked, if it's not labeled, I was like, do I risk it? Because sometimes you can click on something and lead you further into, or, hopefully, not make a purchase, but generally it can cause you to get further into the ad.

Phase 2 User Study 5

I don't like it because I mean you never know what it's gonna do. I mean, I could have pressed the button, and it could have brought me to a website, or you know, I could have done anything it could have brought me to a place where I needed to pay. I mean, that's it. You don't know what the button is going to do.

Phase 2 User Study 3

I wasn't entirely sure what those were, and that was a concern, because at first I wondered if there were unlabeled buttons within the app.

Phase 2 User Study 3

But the fact that the ad featured unlabeled buttons makes me still more concerned about what those buttons might do, what they open up, like Play Store page with another app. Where would those buttons take me anytime?

"-Pestilence" (1)

Phase 2 User Study 3

I tend to view ads almost like a pestilence.

"- quicker" (1)

Phase 1 User Study 3

But I think it may have also been I knew what I was doing for this one, so it was seems quicker.

"-tiring" (1)

Phase 1 User Study 3

t's tiring after all, if I had to do it every day,

Make the navigation slower (1)

Phase 1 User Study 1

and it makes navigating the app way slower sometimes.

Unrelated to the app (1)

Phase 3 User Study 2

Personally, I think the advertisements were a waste of time, you know, and didn't really have anything to do with the app at all.

Time-consuming (3)

Phase 3 User Study 4

Yeah, because then I have to waste my time, trying to get out of the ad, closing the ad, not being sure what I clicked, if it's not labeled, I was like, do I risk it? Because sometimes you can click on something and lead you further into, or, hopefully, not make a purchase, but generally it can cause you to get further into the ad.

Phase 1 User Study 4

Yes, if I was swiping and I realized it took a bit of time.

Phase 2 User Study 2

you know, like, it's time consuming.

Break the flow of the reading (2)

Phase 3 User Study 5

And we had another ad, the ad blocked my ability to understand the app content.

Phase 2 User Study 1

So I found an ad right there in the middle of the page, you know, it broke the flow of the reading, it broke my flow because I literally have to swipe 6 times in order to get to the actual list of expenses.

The curse of the Internet (1)

Phase 2 User Study 2

It's always advertisements, you know, the curse of the Internet pretty much it makes everything miserable.

Ads are noises (5)

Phase 3 User Study 5

Ideally, I would categorize all ads as intrusive, especially since it did block my access to the wanted information, that in my opinion is intrusive.

Phase 3 User Study 3

it's sort of just background noise.

Phase 3 User Study 3

But I don't know like it's sort of just background noise.

Phase 1 User Study 3

If not, if it's not really what I'm looking for.

Phase 2 User Study 2

They're clean, it's just noise. I like, I don't know, there is something in my brain to like it automatically just kind of switch it off. I don't even know what that thing was trying to advertise, it's just noise.

Easy to navigate (2)

Phase 3 User Study 2

I felt like the second up the premium version was a lot more easier to navigate because there were no ads in the way, you know, and it was, you know, pretty fluent to navigate using talk back.

Phase 3 User Study 2

I feel it's pretty easy to navigate if the developer of the app implements close ad button in the actual advertisement, you know, like, in the actual app itself.

Less efficient (7)

Phase 1 User Study 5

I I don't like advertisements in apps, because then they they they seem they tend to get in my way.

Phase 3 User Study 4

 The one with the ads, the only thing is that when we did the budget where the ad was at the bottom (The accessible native ad when she created the budget plan), and I had to swipe once more to get to the button.

Phase 3 User Study 2

 He gets concerned when the focus is on the video playing and tries multiple swipes to exit it.

Phase 3 User Study 1

 I think so it's not something that like, I couldn't get over, but it definitely does add extra stuff to deal with.

Phase 3 User Study 1

 And so that also makes using the app overall less efficient.

Phase 3 User Study 1

Umhm, because you need to spend extra time to navigate through the app right it's like a less efficient compared to the ad free version.

Interviewee: Yeah

Phase 1 User Study 3

 Yes, and that's just for convenience and speed.

"frustrated" (2)

Phase 1 User Study 1

 Then that's you know, that make me really frustrated.

Phase 1 User Study 2

 Oh, dear, I'm afraid the only way I know of at this point to X out of this ad is to close the app entirely and relaunch it.

inconvenience (3)

Phase 1 User Study 3

 Yes, and that's just for convenience and speed.

Phase 1 User Study 1

 And also it's just when there is, you know, an advertisement, and you have to swipe through it or past it, it's really inconvenient, and it makes navigating the app way slower sometimes.

But it's not, it always makes everything difficult, and I don't know like there's probably something I'm missing, but right now, like I can't even figure out like the app won't even close properly and I'm sure like, if I restarted my phone, obviously it would close everything, and then I would have to restart Zoom again.

"blocker" (3)

it's not blocking like I I can't. I don't have to find some weird button to to see what I want to see.

the last one that we saw with the puzzle game, [because] I wasn't able to go out of that.

But especially the, like going to the settings and then not being able to go out of that advertisement like that was definitely a blocker.

"annoying" (11)

But if it's something that I'm using a lot, then I will get the ad-free version because the ads are still kind of annoying.

But if it's something that I'm using a lot, then I will get the ad-free version because the ads are still kind of annoying.

Yes, because I was forced to hear Talk back read them out.

Which is annoying to have to listen to.

I'm like, okay, there's quite a bit of images here, but I don't really have a specific number that I would be after a while, if I had to do it every time I use the app, then that would get very annoying after a while.

And because of the inaccessibility of ads, and because of the annoyance of ads.

Phase 1 User Study 1

 for sure.

Phase 1 User Study 1

 But, like, if I had to use this app you know a lot, then that would probably irritate me a little bit.

Phase 2 User Study 1

 I feel as though like, it is intrusive and it is very annoying because why should I have to open another app just to close an advertisement.

Phase 2 User Study 2

 Like I might have known a few more tricks, maybe, but it's annoying, right?

Phase 1 User Study 1

 It definitely was annoying.

"stuck" (9)

Phase 2 User Study 1

 Most of them are cumbersome to use, particularly because they trap, they sometimes trap you in a WebView and you can't get out of it by standard TalkBack back gestures.

Phase 2 User Study 4

 So I'm actually not able to proceed at this point, because the advertisement is so intrusive that I can't actually view anything else.

Phase 1 User Study 5

yeah, I have had that experience like sometimes, if you know, I'm trying to get through an app, and there's so many advertisements that I can't, you know, really use it without a big you know a big deal. then sometimes I will stop using them, or if they're and I've had this happen, you know, even with the, you know, lots of different ads where our apps, where they'll, you know, have the videos. And if I can't get out of it or use it. and I keep getting stuck. Yeah, then, I stop using the app

Phase 1 User Study 4

 It looks like I'm stuck here.

Phase 3 User Study 2

 We get talk back get stuck on the ad, you know.

Phase 1 User Study 3

So I think, eventually, I think I just closed it, and when it opened back up, I, because it's I'm thinking of a game I was playing, and it was, you do this and you'll get, you know, bonus gold by watching the advertisements and that's where you get stuck. So I just skip that and don't do it.

Phase 1 User Study 1

pretty much stuck

Phase 2 User Study 2

" Then he realized he was still stuck at the current window.

Phase 2 User Study 2

I seem to be stuck in something, the back button is not there and I can't seem to find the close button.

confusing (17)

Phase 2 User Study 4

Sometimes you will tap on an item that you think is a close button.

Phase 1 User Study 5

Oh, oh, those video ads. Oh, boy, yeah, okay, no. I never would have guessed that I was like, Okay, where is the content? I'm like. I don't understand, I said

Phase 1 User Study 4

I'm not sure what this is.

Phase 3 User Study 2

He tries navigating to the add button, but is confused when reaching the ad.

Phase 3 User Study 3

So I was using like Snapchat just for a test, right like, I don't actually use Snapchat, but I don't, and like I have no idea I had no idea where anything on the snapshot screen was right like it's just anything, and I don't know but you know it didn't help that. A lot of their features didn't have like understandable text labels. And so it was just like going through stuff. And like, you know, for all I know, any of that could have been in part of an ad, or it could have been part of the app like there was no way of knowing

Phase 1 User Study 3

So it's, I don't understand the layout at this point.

Phase 1 User Study 3

[She was confused]

Phase 2 User Study 3

I wasn't entirely sure what those were, and that was a concern, because at first I wondered if there were unlabeled buttons within the app.

Phase 2 User Study 3

I'm guessing that the the content of this advertisement is misleading where you can't really be sure if it is an ad, or if it's part of the app.

Interviewee: Yeah it really is.

Phase 1 User Study 3

So I had no no idea what it was.

Phase 1 User Study 3

Okay, I'm not sure what is happening here.

Phase 1 User Study 3

But at this point I have no clue. So it's, I don't understand the layout at this point.

Phase 2 User Study 2

[he did not recognize this advertisement, but he mentioned it did cause confusion to him.

Phase 2 User Study 1

The advertisement at the top of the page makes more confusing because you would expect the normal icons at the top of the page like the navigation drawer, the more options button, etc.

Phase 2 User Study 1

You know, it's easier to go to the bottom of the page rather than the top because it's swiping through the elements at the top, and most common elements at the top of the page. And so that would make it more confusing.

Phase 1 User Study 1

I'm not sure if any of that is clickable or not.

Phase 1 User Study 1

there's no clear label

"not very useful" (3)

Phase 1 User Study 4

But it's not helpful. And I'm not really really sure what the context is here.

not very useful

So not very useful there

Waste of time (2)

 Yeah, because then I have to waste my time, trying to get out of the ad, closing the ad, not being sure what I clicked, if it's not labeled, I was like, do I risk it?

 Personally, I think the advertisements were a waste of time, you know, and didn't really have anything to do with the app at all.

undesirable (1)

 And, unfortunately, the inaccessibility of the ads in the first app rendered the entire experience much less desirable.

distressing (2)

 And you know it's just kind of stressful, and that's kind of startling, too, because you're sitting there and all of a sudden, it woo woo woo, yeah, it's kind of startling.

 And that's very distressing.

"nuisance" (1)

 They were, like, nuisance.

hard to navigate (2)

Phase 3 User Study 2

It's definitely a lot harder to navigate, because there was, ads in the way. You know. there was some ads that covered both the top and bottom half of the screen. And so it's hard to tell sometimes. Okay, which is the app and which is the ad

Phase 1 User Study 2

Most likely I uninstalled the app.

"interstitial" unintuitive (1)

Phase 2 User Study 2

Interstitial Close kind of suggests some kind of existential, weird thing.

"cumbersome" (1)

Phase 2 User Study 1

Most of them are cumbersome to use,

"better user experience" (1)

Phase 2 User Study 1

You know and overall it's a better user experience with no ads.

"more fluid" (1)

Phase 2 User Study 1

This one (the second app) is definitely more fluid, this experience is definitely more fluid, because, there are, there are no ads in the way, you know, getting in the way of the experience.

obtrusive (2)

Phase 2 User Study 4

So I'm actually not able to proceed at this point, because the advertisement is so intrusive that I can't actually view anything else.

Phase 2 User Study 1

It is pretty, you know, it is pretty obtrusive.

invasive (1)

Phase 1 User Study 2

This one seems a little bit more invasive because I'm not seeing a way to X out of this ad.

Concerned (9)

Phase 3 User Study 2

He gets concerned when the focus is on the video playing and tries multiple swipes to exit it.

Phase 3 User Study 2

Yes, yes, I do yeah,

Phase 2 User Study 3

I wasn't entirely sure what those were, and that was a concern, because at first I wondered if there were unlabeled buttons within the app.

Phase 1 User Study 3

I prefer not to have the commercials there, because it's just it interferes, and mainly with the screen reader, and when it pops you into an app[ad] you have, you never know if it's gonna work with the screen reader, because I've had apps[ads] and other applications where I can't close it out.

Phase 2 User Study 3

Plus, I also would be a little concerned that it might open an advertisement for that app in my Google Chrome Browser.

Phase 2 User Study 3

But the fact that the ad featured unlabeled buttons makes me still more concerned about what those buttons might do, what they open up, like Play Store page with another app. Where would those buttons take me anytime?

Phase 1 User Study 2

But it is a concern nonetheless.

Phase 1 User Study 2

Because then I don't know if I've accidentally clicked an install button.

Phase 1 User Study 2

But if a developer is going to host ads that are inaccessible, that's still, is a cause for concern, in my opinion, as a user.

format-specific opinion (5)

Phase 1 User Study 4

if it is full screen text, fine, as long as there's a close button.

Phase 2 User Study 3

the ones which only took up part of the screen and which I was able to successfully navigate either around or past to utilize the rest of the app.

Phase 2 User Study 3

But I was grateful that at least it didn't hinder me from using the app.

Phase 1 User Study 1

hmm, I see. So you think the embedded one is less intrusive than the like the interstatial one. Right?

Interviewee: Yeah

Phase 1 User Study 1

I think it was probably like a dictionary app, or something that had like embedded ads like within the screen.

----Embedded ads at the bottom are more flexible (1)

Phase 3 User Study 4

I mean, the categories are there, so if I want to see the advertisement, I can just flip down to it. But if not, I can just continue with what I'm trying to do.

-- embedded ad is not a blocker (1)

Phase 3 User Study 3

it's not blocking like I I can't. I don't have to find some weird button to to see what I want to see.

-- ads in the middle are annoying (3)

Phase 3 User Study 3

So it's less annoying compared to the one in the middle.

Phase 2 User Study 4

And so if you have an advertisement in the middle of the screen, it can really make the experience incredibly tedious, and not something that most want to go through more than once.

Phase 2 User Study 4

Advertisements in general can result in talkback performance degrading drastically, depending on how they're laid out. And so if you have an advertisement in the middle of the screen, it can really make the experience incredibly tedious, and not something that most want to go through more than once.

native ad less intrusive (3)

Phase 2 User Study 3

no, it wasn't.

Phase 2 User Study 3

But I was grateful that at least it didn't hinder me from using the app.

Phase 1 User Study 1

The was less intrusive that way.

Dislike - Interstitial ad with a video (3)

Phase 1 User Study 5

I don't really like like the videos and all that.

Phase 1 User Study 4

generally positive. I haven't seen much, ads like the videos like that that take over the entire screen so like full screen ads, it's generally just a simple. This is an app. You can download it here. And then it's gone, or it'll give me a close button, or I can just swipe

Phase 2 User Study 2

But it's a window that like goes over top of the app and plays video and audio.

concern about embedded ads (3)

Phase 3 User Study 4

I prefer the close ad over trying to figure out where it is located, where to get out of the ad.

Phase 3 User Study 2

Do these ads at the end of the screen concern you because you're not always sure if it's there or not.

Interviewee: Yes, yes, I do yeah,

Phase 1 User Study 1

 I think it was probably like a dictionary app, or something that had like embedded ads like within the screen.

The embedded ad was less intrusive (5)

Phase 3 User Study 5

 Accessible embedded because then my focus is not being taken entirely out of the app, that way, I can continue to use the app.

Phase 2 User Study 4

 No, it was not because it was at the end of the page.

Phase 3 User Study 3

They are definitely less intrusive. The big thing is the ones that they are the full screen ones that just come up like in the middle of you doing something.

Phase 2 User Study 3

 the ones which only took up part of the screen and which I was able to successfully navigate either around or past to utilize the rest of the app.

Phase 1 User Study 1

hmm, I see. So you think the embedded one is less intrusive than the like the interstatial one. Right?

Interviewee: Yeah

Easier to identify the ads that pop up at the beginning of the app (1)

Phase 3 User Study 2

 Exactly.

embedded ads were confusing (2)

Phase 3 User Study 5

 I'm not sure where the control to close the ad is, but I am grateful that at least this ad didn't come up right away and interfere with adding expenses.

Phase 3 User Study 2

It's definitely a lot harder to navigate, because there was, ads in the way. You know. there was some ads that covered both the top and bottom half of the screen. And so it's hard to tell sometimes. Okay, which is the app and which is the ad

inaccessible launch-time ads prevents app use (1)

Phase 2 User Study 1

There are some apps that just have a, you know, advertisement at the beginning. You know when you start the app and those that I'll probably get rid of, because, you know, if there's an ad start and there's no physical, no visible way to exit it. Then you know, the app just it's not worth my time.

ads on top of page confusing (1)

Phase 2 User Study 1

The advertisement at the top of the page makes more confusing because you would expect the normal icons at the top of the page like the navigation drawer, the more options button, etc.

ad preference (33)

Phase 3 User Study 5

No unlabeled graphics, ideally, there needs to be some ad texts to tell me what the ad is trying to sell me. Many times I've seen ads where all it is a picture, or like a silent video, and I have no idea what I might be clicking into, those ads make me very nervous.

Phase 2 User Study 1

So it's actually a better choice to put the advertisement at the bottom of the page.

Phase 3 User Study 3

So far. Yeah. I mean, if it stays like that, that's cool

Phase 3 User Study 3

So it's less annoying compared to the one in the middle.

Phase 3 User Study 4

Yeah, it's because I can get through all the categories without, like I don't have to swipe through the category. I mean, the categories are there, so if I want to see the advertisement, I can just flip down to it. But if not, I can just continue with what I'm trying to do.

Phase 1 User Study 5

But if I have to have the ads you know, I'd rather just have them to be kind of at the bottom of it. You know what I mean at the end

Phase 3 User Study 5

Accessible embedded because then my focus is not being taken entirely out of the app, that way, I can continue to use the app.

Phase 1 User Study 5

But If they're there, I like it when they're just small, and all I have to do is just scan past them.

Phase 1 User Study 5

But if I have to have the ads you know, I'd rather just have them to be kind of at the bottom of it.

Phase 3 User Study 4

But if it's a full-screen advertisement, I prefer the close button right there at the top so I can just close it and get out of it.

Phase 3 User Study 4

I prefer the close ad over trying to figure out where it is located, where to get out of the ad.

Phase 2 User Study 4

I would prefer the advertisement that would just show up, and then I could tap the back button and be done with it. because it's very clear that it is an advertisement. I have to scroll through unnecessary information to find the information that I am looking for when the advertisement is in the middle of the screen.

Phase 2 User Study 4

Similarly, the advertisements that were at the end of the screen that were non-intrusive.

Phase 2 User Study 4

The first advertisement when the application first opened that I was able to tap on the back button to exit it.

Phase 2 User Study 4

I would prefer the advertisement that would just show up, and then I could tap the back button and be done with it.

Phase 2 User Study 4

Second to that would be the advertisement between, I believe, when I was in the the initial list of categories that when the category list was blank.

Phase 3 User Study 5

 All the interactable elements need to be clearly labeled, I need to be able to tell what's going on.

Phase 3 User Study 4

No, I like the embedded advertisement. Once I realize it was an embedded advertisement, I knew, let me go flick it further so the embedded advertisement is when you're doing something, it's not interfering as much, I can still see I'm in a category. But if it's a full-screen advertisement, I prefer the close button right there at the top so I can just close it and get out of it.

Phase 2 User Study 5

 So it's like an embedded one, not a full screen advertisement.

Phase 2 User Study 5

That's the other thing I like about the advertisements at the bottom of the screen because a lot of times I don't notice them. When they're at the bottom of the screen, I get it more easily.

Phase 1 User Study 4

 it would be nice if the close button was like right up top or right next to the app's name just for quicker navigation.

Phase 1 User Study 4

generally positive. I haven't seen much, ads like the videos like that that take over the entire screen so like full screen ads, it's generally just a simple. This is an app. You can download it here. And then it's gone, or it'll give me a close button, or I can just swipe

Phase 1 User Study 4

That's right. And it's usually just text.

Phase 3 User Study 2

 I would prefer the ads that pop up at the beginning of the application, to be honest with you.

Phase 3 User Study 1

I don't mind the full page ads, because I could close it and hide it. The embedded ones I have to swipe past. And so that also makes using the app overall less efficient.

Phase 3 User Study 3

 The big thing is the ones that they are the full screen ones that just come up like in the middle of you doing something.

Phase 2 User Study 3

the ones which only took up part of the screen and which I was able to successfully navigate either around or past to utilize the rest of the app.

Phase 1 User Study 3

 I prefer if there is an easy way to close out the advertisement. So either you know a close button up at the top, or a button somewhere, saying, you know, something, say, close it, you know, and get rid of it

Phase 1 User Study 3

 It doesn't, I mean, I don't know if I'd want it to up the whole page, so it's generally, if it's I don't know how to describe this in design, but just so, it's where it's more centered, and I can easily get at it without having to do my whole screen to close it out.

Phase 1 User Study 1

 So embedded ones rather than like full page ones are better because I can swipe past them if they're at the bottom like, after all the controls, then I can completely ignore those.

Phase 3 User Study 2

 I feel it's pretty easy to navigate if the developer of the app implements close ad button in the actual advertisement, you know, like, in the actual app itself.

Phase 2 User Study 1

 The first one, when I open the app, is less intrusive.

Phase 1 User Study 2

 Yes.

worst ad (16)

Phase 2 User Study 5

 Probably that last one when I couldn't get past it, and I couldn't find the back button just because I couldn't get out of it, so that would be the one that probably stuck out the most.

Phase 2 User Study 4

Similarly, the advertisement that had the close button that talk back barely recognized that basically recognized as an X. Button. that was very very difficult to navigate. I would have, because the close button was at the very end and talk back required OCR to read it.

Phase 2 User Study 4

Similarly, the advertisement that had the close button that talk back barely recognized that basically recognized as an X. Button. that was very very difficult to navigate

Phase 2 User Study 5

Probably that last one when I couldn't get past it, and I couldn't find the back button just because I couldn't get out of it, so that would be the one that probably stuck out the most.

Phase 1 User Study 5

Yeah, especially the video ad. I mean, it's crazy because it takes up the whole screen, and then you can't get out of it because you can't find the close button for that ad.

Phase 1 User Study 4

definitely the one where it started to play automatically. And I wasn't able to exit it.

Phase 2 User Study 3

The ones that took over the entirety of the screen, and were completely inaccessible.

Phase 2 User Study 3

he ones that took over the entirety of the screen, and were completely inaccessible.

The ones which forced me to completely close out of the app, to do away with them. in order to even be able to use the app.

Phase 1 User Study 3

Whatever that one was that I had no idea what it was. The one that played, I think you said it was a video, the just the music, and I had no clue what it was doing. Okay, I don't know what this is or what I'm, you know, it's not giving me any clue to what it is.

Phase 1 User Study 3

The one that played, I think you said it was a video, the just the music, and I had no clue what it was doing.

Phase 1 User Study 1

the last one that we saw with the puzzle game, [because] I wasn't able to go out of that.

Phase 2 User Study 2

So you think the full screen interstitial advertisement is the most intrusive one?

he: Yeah, for sure.

Phase 2 User Study 2

Yeah, for sure.

Phase 2 User Study 1

Definitely the advertisement with the video, the video player controls (Unlocatable Interstitial Ad) because there was no way of dismissing the advertisement from the controls.

Phase 2 User Study 1

Definitely the advertisement with the video, the video player controls (Unlocatable Interstitial Ad) because there was no way of dismissing the advertisement from the controls. Like it just overlaid the video on top of whatever it was that was on the screen.

Phase 1 User Study 2

The slot machine game advertisement (Unlocatable rewarded advertisement) really presented problems as well as whatever the fourth advertisement (Unlocatable interstitial advertisement)was because there was no way to X out of it.

The ease of closing ads (1)

Phase 1 User Study 1

not really. I think if it's more like, can I make it go away? And if I can make it go away really quickly, then you know, and I can still get to where I [want] to go, yhen, you know, like I just set that aside.

-One time vs every time (1)

Phase 1 User Study 3

but I don't really have a specific number that I would be after a while, if I had to do it every time I use the app, then that would get very annoying after a while. But if it's like a one time thing, I could do it. But if it's constant, then no, I won't want to do it.

----Able to understand the ad content (1)

Phase 3 User Study 5

No unlabeled graphics, ideally, there needs to be some ad texts to tell me what the ad is trying to sell me. Many times I've seen ads where all it is a picture, or like a silent video, and I have no idea what I might be clicking into, those ads make me very nervous.

----All interactable elements should have clear labels (1)

Phase 3 User Study 5

All the interactable elements need to be clearly labeled, I need to be able to tell what's going on.

----Embedded > Interstitial (2)

Phase 3 User Study 5

 Accessible embedded because then my focus is not being taken entirely out of the app, that way, I can continue to use the app.

Phase 3 User Study 4

No, I like the embedded advertisement. Once I realize it was an embedded advertisement, I knew, let me go flick it further so the embedded advertisement is when you're doing something, it's not interfering as much, I can still see I'm in a category. But if it's a full-screen advertisement, I prefer the close button right there at the top so I can just close it and get out of it.

----Embedde bottom > Embedded middle > Interstitial ad (1)

Phase 2 User Study 5

Yes, my first choice would be embedded at the bottom. Second choice would be in the middle, embedded, and then I don't like the full screen ones.

---Have close button (4)

Phase 3 User Study 4

 I prefer the close ad over trying to figure out where it is located, where to get out of the ad.

Phase 2 User Study 4

 I would prefer the advertisement that would just show up, and then I could tap the back button and be done with it.

Phase 1 User Study 4

 if it is full screen text, fine, as long as there's a close button.

Phase 1 User Study 4

 And as long as there is a close button available to the user, a way they can close it right away.

-Close button at the top (4)

Phase 3 User Study 4

 But if it's a full-screen advertisement, I prefer the close button right there at the top so I can just close it and get out of it.

Phase 1 User Study 4

 it would be nice if the close button was like right up top or right next to the app's name just for quicker navigation.

But if it's if I have to do that constantly, yes, I prefer the close to be up at the top instead down at the bottom.

Phase 1 User Study 3

So either you know a close button up at the top, or a button somewhere, saying, you know, something, say, close it, you know, and get rid of it.

- Clear label for the ad close button (3)

Phase 3 User Study 4

I prefer the close ad over trying to figure out where it is located, where to get out of the ad.

Phase 1 User Study 3

I prefer if there is an easy way to close out the advertisement. So either you know a close button up at the top, or a button somewhere, saying, you know, something, say, close it, you know, and get rid of it

Phase 1 User Study 3

So either you know a close button up at the top, or a button somewhere, saying, you know, something, say, close it, you know, and get rid of it.

Interstitial ad (8)

Phase 2 User Study 4

I would prefer the advertisement that would just show up, and then I could tap the back button and be done with it. because it's very clear that it is an advertisement. I'm not having to scroll through unnecessary information to find the information that I am looking for when the advertisement is in the middle of the screen.

Phase 2 User Study 4

The first advertisement when the application first opened that I was able to tap on the back button to exit it.

Phase 2 User Study 4

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Phase 3 User Study 2

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Phase 3 User Study 1

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Phase 2 User Study 1

 The first one, when I open the app, is less intrusive.

Embedded ads - bottom (14)

Phase 2 User Study 1

 So it's actually a better choice to put the advertisement at the bottom of the page.

Phase 3 User Study 3

So far. Yeah. I mean, if it stays like that, that's cool

Phase 3 User Study 3

 So it's less annoying compared to the one in the middle.

Phase 2 User Study 4

 I prefer them at the end.

Phase 3 User Study 4

Yeah, it's because I can get through all the categories without, like I don't have to swipe through the category. I mean, the categories are there, so if I want to see the advertisement, I can just flip down to it. But if not, I can just continue with what I'm trying to do.

Phase 2 User Study 5

 Well, I thought, I'm used to advertisements that are on the end of the, the right edge of the app.

Phase 1 User Study 5

 But if I have to have the ads you know, I'd rather just have them to be kind of at the bottom of it.

Phase 2 User Study 4

Similarly, the advertisements that were at the end of the screen that were non-intrusive.

Phase 2 User Study 5

That's the other thing I like about the advertisements at the bottom of the screen because a lot of times I don't notice them. When they're at the bottom of the screen, I get it more easily.

Phase 3 User Study 1

Yes, unless they are moved out of the way.

Phase 1 User Study 1

So embedded ones rather than like full page ones are better because I can swipe past them if they're at the bottom like, after all the controls, then I can completely ignore those.

Phase 2 User Study 1

The advertisement at the top of the page makes more confusing because you would expect the normal icons at the top of the page like the navigation drawer, the more options button, etc.

Phase 2 User Study 1

Exactly.

Phase 2 User Study 2

So I have to figure out a way to get around this advertising block, just like, you know, it would be one thing if it was just like some unobtrusive link that appears in the corner of the screen that says, Click here, if you're interested in buying 25,000 rolls of toilet paper, and then it would be fine, right?

embedded ads (12)

Phase 3 User Study 5

Accessible embedded because then my focus is not being taken entirely out of the app, that way, I can continue to use the app.

Phase 1 User Study 5

But If they're there, I like it when they're just small, and all I have to do is just scan past them.

Phase 2 User Study 4

Second to that would be the advertisement between, I believe, when I was in the the initial list of categories that when the category list was blank.

Phase 2 User Study 5

So it's like an embedded one, not a full screen advertisement.

Phase 1 User Study 4

generally positive. I haven't seen much, ads like the videos like that that take over the entire screen so like full screen ads, it's generally just a simple. This is an app. You can download it here. And then it's gone, or it'll give me a close button, or I can just swipe

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Phase 1 User Study 3

It doesn't, I mean, I don't know if I'd want it to up the whole page, so it's generally, if it's I don't know how to describe this in design, but just so, it's where it's more centered, and I can easily get at it without having to do my whole screen to close it out.

Phase 1 User Study 1

So embedded ones rather than like full page ones are better because I can swipe past them if they're at the bottom like, after all the controls, then I can completely ignore those.

Phase 1 User Study 2

Ideally as small and unintrusive as possible, preferably not videos, because videos again, inhibit my ability, especially if they contain auditory content to hear what my screen reader is saying.

Phase 1 User Study 2

Yes.

Contacting developers (11)

Phase 1 User Study 5

Hmm, no, I haven't. I kind of just figured. Well, you know there wasn't much I could do. But no, no, I really haven't contacted them about that.

Phase 2 User Study 4

not for inaccessible advertising

Phase 1 User Study 4

 And then I heard back from a developer a couple of days later, and they just said, You know, we're sorry for the inconvenience of the video ads, and we try to investigate if we can lower the volume or something like that, because the video was really really loud, and I just turned down the volume.

Phase 1 User Study 4

 Yeah. Usually responding.

Phase 3 User Study 2

 yes, I have. Yes, I have. I've actually contacted a developer just recently regarding an accessibility issue in an app. And they promptly wrote back to me. They were like, Hey, yeah, we'll fix it, you know we'll fix it in the next couple of versions of the app that we're releasing.

Phase 3 User Study 1

 I usually use the email and occasionally I would have like a positive response. But most of the time, you know, didn't really get a good response or no response at all.

Phase 1 User Study 3

You know what, it's been so long, I can't remember, but they're usually pretty good about it. So I would assumed at some point, they did. They usually respond.

Phase 1 User Study 3

 You know what, it's been so long, I can't remember, but they're usually pretty good about it.

Phase 1 User Study 1

 no.

Phase 2 User Study 1

 No, I haven't.

Phase 1 User Study 2

Not very often, I don't, again, I don't prefer to contact developers over ads

Not a good response/ No response from developers (2)

Phase 3 User Study 1

 But most of the time, you know, didn't really get a good response or no response at all.

Phase 3 User Study 1

I've done that before with other kinds of accessibility. and you know I've gotten a response. But nothing, you know, nothing's changed. Or it doesn't really encourage any change.

Developers are responsive (6)

Phase 1 User Study 4

Usually responding.

Phase 1 User Study 4

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Phase 1 User Study 3

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Phase 1 User Study 3

You know what, it's been so long, I can't remember, but they're usually pretty good about it.

thresholds (0)

----threshold of number of ads (1)

Phase 1 User Study 5

I don't know. Maybe, like, if there are 2 ads, it's all right. But otherwise, if there's start to get more than like 3 or 4, it's like, okay.

threshold of time spent on ad (2)

Phase 1 User Study 3

So my main thought process I don't want to have to take 3 or 4 times as long to do something as it would as if I had vision, which I already know it's going to take me longer.

Phase 1 User Study 1

But if, like, it takes me maybe like a minute or more to struggle getting the ad to disappear.

threshold of swipes (4)

Phase 2 User Study 1

I'd say, 6 times, would be the number of me.

Phase 2 User Study 4

But if I have to swipe more than, I would say that, 10 is a pretty reasonable number to expect. In fact, more than 10 times, it gets me irritated very quickly.

Phase 1 User Study 4

If they are swiping, because definitely 10 times is way too many times.

Phase 1 User Study 2

I would say more than 3 to 5 times.

Prefers the ad-free version (27)

Phase 3 User Study 5

I still would rather get rid of them even though they're quite accessible.

Phase 3 User Study 5

I'm very aggressively opposed to advertising.

Phase 2 User Study 5

Oh, I like this one a lot better.

Phase 1 User Study 5

I'd rather just pay and not have the ads.

Phase 1 User Study 5

you know, it depends on like sometimes when you pay, you know you'll get you'll get a little extra. I always like that.

Phase 1 User Study 5

I actually like the second one a little more, because I didn't have as many ads that got in the way.

Phase 2 User Study 4

Fairly often. if I use an application on a regular basis

Phase 2 User Study 4

And would definitely I, personally, would not be using that application. But the money manager premium, on the other hand, everything went very smoothly. again, you know, considering it's it is essentially money manager without advertisements really alleviated all of my issues. And and I had no issues.

Phase 2 User Study 4

if I use an application on a regular basis I don't want to really name names here, but I mean, I guess the application that I use on a fairly regular basis is some podcast addict.

Phase 2 User Study 5

Oh, I like this one a lot better. It's just so much easier to go through it without having to deal with the ads.

Phase 2 User Study 5

That's just me, if I can, and if the apps only like 3 or whatever, well, it maybe even 5 or something, I'll pay to get rid of the ads, but usually a lot of times when I have to deal with them, I've been fortunate enough that most of the apps that I've used they've done like at the right edge of the screen.

Phase 2 User Study 5

I'm not used to, so I'll reiterate this again, but you know, I'm the one who paid to get rid of the ads.

Phase 1 User Study 4

If there was an ad free version, or even if you pay a dollar or 2 to get rid of ads.

Phase 1 User Study 4

The second one was a lot better. a lot easier to get around. no ads clogging up the screen.

Phase 1 User Study 4

If this was like a subscription service, I would classly pay to subscribe for that or free.

Phase 1 User Study 4

goes through the tasks again. "So this is way. Better because we have no ads here."

Phase 3 User Study 2

 I felt like the second up the premium version was a lot more easier to navigate because there were no ads in the way, you know, and it was, you know, pretty fluent to navigate using talk back.

Phase 3 User Study 1

 The second one was definitely better mainly because there were no ads.

Phase 3 User Study 3

 I definitely like the premium one more because there are no ads.

Phase 1 User Study 3

 So I would actually probably use it because it was once I figured it out, or you helped me figure it out, it was easy to use and would be a great place to make notes.

Phase 2 User Study 3

 [In the middle of executing] I will just say right now that the fact that I have not been presented with an ad yet strongly biases me towards using this premium version.

Phase 2 User Study 3

 If the app is generally accessible, otherwise I would consider purchasing the premium version.

Phase 1 User Study 3

 Yeah, as long as it's not, you know I'm one of those ones, I'd rather pay one price than constantly pay a price.

Phase 1 User Study 3

 I prefer not to have the commercials there, because it's just it interferes, and mainly with the screen reader, and

Phase 1 User Study 2

 The second app was much better and much more straightforward due to the lack of ads.

Phase 1 User Study 1

The second one was definitely better. No advertisements, that's the main thing.

Phase 1 User Study 2

 Yeah

factors for ad free version (25)

Phase 3 User Study 5

 I'm very aggressively opposed to advertising.

Phase 2 User Study 5

 It's just so much easier to go through it without having to deal with the ads.

Phase 1 User Study 5

 Well, I mean, it depends on how much it is obviously.

Phase 1 User Study 5

 Well, okay, the other thing that'll affect whether I buy an app or not is how accessible it is.

Phase 1 User Study 5

 I actually like the second one a little more, because I didn't have as many ads that got in the way.

Phase 2 User Study 4

 Should be accessible and usable by talk back there should be no unlabelled buttons.

Phase 2 User Study 4

 Fairly often. if I use an application on a regular basis

Phase 2 User Study 4

 if I use an application on a regular basis I don't want to really name names here, but I mean, I guess the application that I use on a fairly regular basis is some podcast addict.

Phase 2 User Study 4

 I think the biggest barrier is specifically the advertisements, the lack of ability to close and then escape some of the advertising.

Phase 1 User Study 5

 Generally speaking, they were pretty easy to use.

Phase 1 User Study 4

I like the layout of it. It's it's nice. It just drops you into a head of box. Once you make the name, and you could change the different formats that it makes. I really do like that uses Mark down. That's a really nice feature for me.

Phase 1 User Study 4

 If there was an ad free version, or even if you pay a dollar or 2 to get rid of ads.

Phase 1 User Study 4

 no ads clogging up the screen.

Phase 1 User Study 4

The second one is a lot better, definitely just because the ads kind of get in the way. a bit difficult, especially with the one that just got stuck. and I could get out of it.

Phase 1 User Study 4

 a lot easier to get around.

Phase 3 User Study 2

Yes, I would. Yes, yes, yes, yes, I would.

Phase 1 User Study 3

 I prefer not to have the commercials there, because it's just it interferes, and mainly with the screen reader, and when it pops you into an app[ad] you have, you never know if it's gonna work with the screen reader, because I've had apps[ads] and other applications where I can't close it out.

Phase 2 User Study 3

 And in all fairness the ease and facility of this app is biasing me strongly towards actually in the real world, buying this app because of how much nicer the premium version is.

Phase 2 User Study 3

 If the app is generally accessible, otherwise I would consider purchasing the premium version.

Phase 1 User Study 3

 If it has it, you know I'll be, I'll try it for a while with it [advertisement], and if I don't like it, or if it won't, won't work with my screen reader, then I'll pay to get rid of them, because if I could do it without having to pay, and it doesn't cause a lot of hassle, then I'll use it with the advertisement.

Phase 1 User Study 3

 I prefer not to have the commercials there, because it's just it interferes, and mainly with the screen reader, and

Phase 1 User Study 1

Depends on what the app can offer like if it's something that I really need for a particular situation. And it works, you know, for what I need. Then I might still try it anyways.

Phase 3 User Study 2

 Yes.

Phase 1 User Study 2

 If the ads are too intrusive, I will either opt to pay them away or do away with them.

Phase 1 User Study 2

 I would if I were to find out that the app itself was accessible that wouldn't but inclined me towards making that purchase to remove the ads.

ad's compatibility with screen reader (1)

Phase 1 User Study 3

 I prefer not to have the commercials there, because it's just it interferes, and mainly with the screen reader, and when it pops you into an app[ad] you have, you never know if it's gonna work with the screen reader, because I've had apps[ads] and other applications where I can't close it out.

If users can find an alternative (2)

Phase 2 User Study 4

 I feel like I would probably be able to find an alternative that worked a little better without having to pay.

Phase 2 User Study 4

If I couldn't find an alternative that worked as well.

-Not too pricey (4)

Phase 1 User Study 5

 Well, I mean, it depends on how much it is obviously.

Phase 2 User Study 4

 I feel like this is taking advantage of people in a way, for sure, especially if the price of upkeep to remove advertising is excessively high versus other applications that do the same thing.

Phase 1 User Study 4

 If there was an ad free version, or even if you pay a dollar or 2 to get rid of ads.

Phase 1 User Study 3

 So generally, if it's not a big price, I'd rather just get rid of them, I didn't have to deal with them.

Opposed to ads (6)

Phase 3 User Study 5

I'm very aggressively opposed to advertising.

Phase 2 User Study 5

And I didn't, you know, like the other one when I got to the edit, and it played all that music and stuff, and I'm well, what am I going to do?

Phase 1 User Study 3

I prefer not to have the commercials there, because it's just it interferes, and mainly with the screen reader, and

Phase 1 User Study 2

I will often choose to go ahead and pay for an app if the paid version is more accessible than the free version, and thereby removes the ads.

Phase 1 User Study 2

I tend to be very aggressively opposed to advertisements

Phase 2 User Study 2

It's just ad, that's the only thing.

usage frequency (4)

Phase 1 User Study 5

how much I think I'm going to use the app

Phase 2 User Study 4

Fairly often. if I use an application on a regular basis

Phase 2 User Study 4

if I use an application on a regular basis I don't want to really name names here, but I mean, I guess the application that I use on a fairly regular basis is some podcast addict.

Phase 3 User Study 1

But like, if it's something that I'm using a lot you know. Then I probably get the ad free version because the ads are still kind of annoying.

usability factor (16)

Phase 2 User Study 5

It's just so much easier to go through it without having to deal with the ads.

Phase 2 User Study 4

Should be accessible and usable by talk back there should be no unlabelled buttons.

Phase 2 User Study 4

And would definitely I, personally, would not be using that application. But the money manager premium, on the other hand, everything went very smoothly. again, you know, considering it's it is essentially money manager without advertisements really alleviated all of my issues. And and I had no issues.

Phase 2 User Study 4

I shouldn't have to use alternative talk back gestures and commands to perform simple tasks.

Phase 1 User Study 5

Generally speaking, they were pretty easy to use.

Phase 1 User Study 4

I like the layout of it. It's it's nice. It just drops you into a head of box. Once you make the name, and you could change the different formats that it makes. I really do like that uses Mark down. That's a really nice feature for me.

Phase 1 User Study 4

The second one was a lot better. a lot easier to get around. no ads clogging up the screen.

Phase 1 User Study 4

a lot easier to get around.

Phase 3 User Study 3

Easy to use.

Phase 3 User Study 3

Easy to use. you know, everything was labeled. There was no mystery buttons or anything like that.

Phase 1 User Study 3

So I would actually probably use it because it was once I figured it out, or you helped me figure it out, it was easy to use and would be a great place to make notes.

Phase 2 User Study 3

And in all fairness the ease and facility of this app is biasing me strongly towards actually in the real world, buying this app because of how much nicer the premium version is.

Phase 1 User Study 3

Generally, it's how complicated the task is.

Phase 2 User Study 3

The fact that the app itself is fully accessible. There's been no unlabeled buttons. The interface is straightforward and simple.

Phase 1 User Study 3

And then the images and the graphics not being labeled, but otherwise than that everything worked and wasn't complicated to do it.

Phase 2 User Study 2

It was very very clear and straightforward seeming.

accessibility factor (17)

Phase 1 User Study 5

Well, okay, the other thing that'll affect whether I buy an app or not is how accessible it is. I mean, if it's an app that isn't all that accessible I'd be like, I don't think so, you know. I'll just stick with the ad version, or else, you know, maybe use a different app.

Phase 1 User Study 5

Well, okay, the other thing that'll affect whether I buy an app or not is how accessible it is.

Phase 2 User Study 4

Should be accessible and usable by talk back there should be no unlabelled buttons.

Phase 2 User Study 4

Really, the fact that I was actually blocked from using a portion of the application because of advertisements.

Phase 2 User Study 4

And would definitely I, personally, would not be using that application. But the money manager premium, on the other hand, everything went very smoothly. again, you know, considering it's it is essentially money manager without advertisements really alleviated all of my issues. And and I had no issues.

Phase 1 User Study 4

Right

Phase 3 User Study 3

Easy to use. you know, everything was labeled. There was no mystery buttons or anything like that.

Phase 2 User Study 3

 The fact that the app itself is fully accessible.

Phase 2 User Study 3

 If the app is generally accessible, otherwise I would consider purchasing the premium version.

Phase 2 User Study 3

The fact that the app itself is fully accessible. There's been no unlabeled buttons. The interface is straightforward and simple.

Phase 2 User Study 2

 It was very very clear and straightforward seeming.

Phase 2 User Study 1

 I feel like the app needs to be about 85 to 95% accessible for me to consider paying for a subscription.

Phase 1 User Study 2

 I will often choose to go ahead and pay for an app if the paid version is more accessible than the free version, and thereby removes the ads.

Phase 1 User Study 2

 But usually, if it's an app like that, many times there is an option to pay away the ads and do away with the entire problem.

Phase 1 User Study 2

 I would if I were to find out that the app itself was accessible that wouldn't but inclined me towards making that purchase to remove the ads.

Phase 2 User Study 2

 Because of what I was saying earlier, like it seemed very clear, very easy to just add categories, and then you could see how much of your budget had been used, everything made sense.

Phase 1 User Study 1

 yeah, a little bit.

users' needs factor (9)

Phase 1 User Study 5

how much I think I'm going to use the app

Phase 1 User Study 4

I like the layout of it. It's it's nice. It just drops you into a head of box. Once you make the name, and you could change the different formats that it makes. I really do like that uses Mark down. That's a really nice feature for me.

Phase 3 User Study 1

But like, if it's something that I'm using a lot you know. Then I probably get the ad free version because the ads are still kind of annoying.

Phase 2 User Study 3

And in all fairness the ease and facility of this app is biasing me strongly towards actually in the real world, buying this app because of how much nicer the premium version is.

Phase 1 User Study 1

Depends on what the app can offer like if it's something that I really need for a particular situation. And it works, you know, for what I need. Then I might still try it anyways.

Phase 2 User Study 1

If feel that it is worth it if the app provides any, you know, substantial value or purpose, or is in central, you know, in a central, like a job relating on Zoom or something like that. You know, if it's just like a leisure app, then I don't feel the point of, you know, paying the subscription or removing the advertisements.

Phase 1 User Study 2

Right, at that point, again, it depends on how radical the app is to what I want to do.

Phase 1 User Study 2

But usually, if it's an app like that, many times there is an option to pay away the ads and do away with the entire problem.

Phase 1 User Study 2

It has in the past, if the ads are aggressive and there is no way to disable them, most often, if the app is not absolutely necessary to get something done. If the ads are too intrusive, I will either opt to pay them away or do away with them

ads are too intrusive (10)

Phase 1 User Study 3

And if you keep the advertisements in there, you can't use it with the screen reader, so you have to pay to get rid of them because it won't work otherwise to accomplish to transfer your files.

Phase 3 User Study 5

Ideally, I would categorize all ads as intrusive, especially since it did block my access to the wanted information, that in my opinion is intrusive.

Phase 1 User Study 5

I actually like the second one a little more, because I didn't have as many ads that got in the way.

Phase 2 User Study 4

I think the biggest barrier is specifically the advertisements, the lack of ability to close and then escape some of the advertising.

Phase 1 User Study 4

The second one was a lot better. a lot easier to get around. no ads clogging up the screen.

Phase 1 User Study 4

The second one is a lot better, definitely just because the ads kind of get in the way. a bit difficult, especially with the one that just got stuck. and I could get out of it.

Phase 1 User Study 3

If it has it, you know I'll be, I'll try it for a while with it [advertisement], and if I don't like it, or if it won't, won't work with my screen reader, then I'll pay to get rid of them, because if I could do it without having to pay, and it doesn't cause a lot of hassle, then I'll use it with the advertisement.

Phase 2 User Study 3

And the factor that was causing the problems with the other app was the presence of ads.

Phase 2 User Study 1

You know, I will pay for an app to get rid of the ads if the ads are intrusive.

Phase 1 User Study 2

If the ads are too intrusive, I will either opt to pay them away or do away with them.

One-time vs monthly subscription (9)

Phase 1 User Study 5

So one time payment. Yeah, I like the one time payments. because otherwise you know the subscription. You just keep paying and paying and paying, and then, if you don't pay no, I like it when there's a one time payment.

Phase 2 User Study 4

correct. I don't want to be spending every month to remove advertising. I I think that's not a great way, not a great business idea.

Phase 2 User Study 4

that is for the lifetime of the application.

Phase 2 User Study 4

if there are more perks than just removing the advertising, then you know, I would, of course, spend more. But at this current time definitely $3 to $4 is, it's kind of my maximum for removing advertisement, and that is for the lifetime of the application.

Phase 3 User Study 2

honestly, no, because I would pay a one time (fee) and that would be it, you know.

Phase 3 User Study 2

As long as the app you know, has other features besides removing ads in the subscription, I would use that. But just for removing ads. I would just pay a one time thing, you know.

Phase 1 User Study 3

Yeah, as long as it's not, you know I'm one of those ones, I'd rather pay one price than constantly pay a price.

Phase 2 User Study 1

If we're talking about removing ads only, then I would just do one time subscription. Now, if it was like constantly adding features, and you know, keep the app up to date and current, you know, then I would definitely consider an ongoing subscription to the app.

Phase 2 User Study 2

I would prefer one time, I guess, just because I don't have to worry about it after it's paid. But I mean, that's just me. I don't know. I definitely prefer paying for something once and having it and not having to worry about oh, no, I won't be able to pay for our next month, and then it's going to be gone.

-Accessibility>User's need (1)

Phase 2 User Study 3

The accessibility.

avoiding apps with ads (1)

Phase 1 User Study 1

I try to download apps that have little to no advertisements.

wants ads removed even if accessible (2)

Phase 3 User Study 5

 I still would rather get rid of them even though they're quite accessible.

Phase 3 User Study 2

okay, would you still get a subscription to remove those ads, even if they weren't a blocker?

Interviewee: Yes, I would. Yes, yes, yes, yes, I would.

Accessibility plays a small role when deciding whether to try the ad-free version (1)

Phase 1 User Study 1

yeah, a little bit. I think with, you know, if they aren't ads, at least they might be less intrusive, hopefully. But also, you know, if it's an app that I need for a particular purpose for or for a situation, and I know it's accessible then I might still just grab it anyways.

price threshold for premium (4)

Phase 2 User Study 4

 No more than 3 or $4, if it's simply advertising.

Phase 2 User Study 5

 That's just me, if I can, and if the apps only like 3 or whatever, well, it maybe even 5 or something, I'll pay to get rid of the ads, but usually a lot of times when I have to deal with them, I've been fortunate enough that most of the apps that I've used they've done like at the right edge of the screen.

Phase 1 User Study 4

 If there was an ad free version, or even if you pay a dollar or 2 to get rid of ads.

Phase 2 User Study 1

 I say, no more than 10 dollars a month.

Looking for more than just removing ads (4)

Phase 1 User Study 5

And then sometimes, you know, it depends on like sometimes when you pay, you know you'll get you'll get a little extra.

you know, it depends on like sometimes when you pay, you know you'll get you'll get a little extra. I always like that.

if there are more perks than just removing the advertising, then you know, I would, of course, spend more.

Yeah.

Premium features (1)

Well, you know, the premium version has features that the the regular the free version doesn't, for example, I don't know like it may not allow you to add more than the free version, might allow you to only add one category, and you know the premium version, you know, might allow you to have unlimited categories, etc.

factor for using an app even with ads (5)

yeah, I mean, I would certainly use the app, like even as is with like the way it is.

They are definitely less intrusive.

if I could do it without having to pay, and it doesn't cause a lot of hassle, then I'll use it with the advertisement.

If it has it, you know I'll be, I'll try it for a while with it [advertisement], and if I don't like it, or if it won't, won't work with my screen reader, then I'll pay to get rid of them, because if I could do it without having to pay, and it doesn't cause a lot of hassle, then I'll use it with the advertisement.

if it's an app that I need for a particular purpose for or for a situation, and I know it's accessible then I might still just grab it anyways.

strategies (0)

Find the hidden button through an external keyboard (1)

Phase 2 User Study 2

[Even though the recent apps button is hidden, he still managed to find that button through his external keyboard.

----Guess whether an ad can be closed (1)

Phase 1 User Study 5

Yeah. Well sometimes you have to guess. I don't necessarily know. Sometimes I close it and then it does close the app which is unfortunate. So it's that kind of thing that I gotta take a chance on.

- Performed the backward navigation when hearing WebView (2)

Phase 2 User Study 3

When I did hear the word web view I immediately backtracked, because my natural assumption, based on my previous experiences with this app was that that web view contained an advertisement.

Phase 2 User Study 3

Inside the category details, he navigates and finds an unlabeled banner ad in the middle of the screen, which is announced as a webview. He immediately goes back up.

-Performed the backward navigation when hearing Unlabeled (1)

Phase 1 User Study 3

As soon as she heard TalkBack announce "Unlabeled", she started to navigate back to the top of the screen to find the button.

Activate any element on the screen (2)

Phase 2 User Study 2

And then I moved, I tried to move to the previous button to see what else was on the screen again, just in case I missed something. I didn't see anything. So I'm like, okay, maybe this is something. And I probably shouldn't have clicked on it, but I did, but somehow it was still on the stop share button. So that's why it stopped.

Phase 1 User Study 1

I would see if I can find like an element, or whatever that I'm able to activate.

Strategy when the close button is not labeled (5)

Phase 2 User Study 1

I usually just guess if there's a button. And if there's a button, that button is probably a close button.

Phase 2 User Study 4

Sometimes you will tap on an item that you think is a close button.

Phase 2 User Study 4

There is something that says Web View, but nothing else. I can try and double tap that I don't know what's going to happen. There is no close button that shows up to talk back.

Phase 2 User Study 5

She adjusted the granularity to different levels but still could not find the desired button.

Phase 2 User Study 1

You know, it's like that button, and you know it will close the ad. If not, then it'll probably open the play store, and I'll just close the play store app and you know, see if that dismisses the advertisement. If that fails, then I'll close off, force closing the app from the app overview.

Strategy when the ads are intrusive (1)

Phase 1 User Study 2

Not very often, because usually, if an advertisement presents itself in excessively, my first gut level response is to try either exit out of the advertisement, or exit out of the app.

Strategy when encountering excessive ad elements (6)

Phase 1 User Study 2

he used backward navigation (Swipe left) to locate the close button of the advertisement.

Phase 1 User Study 5

Well, you know, as I get more familiar with the app I will do some things by explore, by touch, because it's just it's easier, you know, than having to swipe through everything.

Phase 1 User Study 5

I went to the bottom right. And then there was that install, and right to the left of the install button. There was a close button. Because I don't want to go through all those products again

Phase 1 User Study 4

Now I also use a feature called explore by touch, which, where you just put your finger on the screen and move it around. And A lot more users are are using it, but not as much. It's a I've seen, unfortunately. But it's just explore and then you kind of get the real state of the screen and know where things are on the screen.

Phase 1 User Study 3

It's tiring after all, if I had to do it every day, I mean like, I said, if probably more than likely I may have been able to go to the bottom, but with the zoom in the way, it was just easier to swipe through it, because normally I'd go down to the bottom and see if there's a close button.

Phase 1 User Study 1

yeah, like, I mean, I end up doing a little bit of exploring by touch to basically see if I can move my talkback cursor to you know, close to where I need to go, and then swipe to find the button.

Strategies when TalkBack gets stuck (4)

Phase 2 User Study 4

Typically, I press the back button. But typically advertisements are not this intrusive where I actually cannot interact with the application at all.

Phase 1 User Study 4

I would restart the app

Phase 1 User Study 3

So I think, eventually, I think I just closed it, and when it opened back up, I, because it's I'm thinking of a game I was playing, and it was, you do this and you'll get, you know, bonus gold by watching the advertisements and that's where you get stuck. So I just skip that and don't do it.

Phase 1 User Study 1

I would see if I can find like an element, or whatever that I'm able to activate.

[tries navigating on the ad, pressing, which leads to the google playstore page]

Navigation strategy (4)

Phase 2 User Study 5

Once she interacted with the ad, she started to navigate back.

Phase 1 User Study 4

I generally go in the middle and kind of work my way down, and then go up.

Phase 1 User Study 3

Generally I try to see if I find the close button but in this situation, and maybe I could if the Zoom wasn't up on the screen.

Phase 1 User Study 1

I'm gonna make sure I'm at the beginning or the top of the screen.

unsuccessful navigations (5)

Phase 1 User Study 3

when it pops you into an app[ad] you have, you never know if it's gonna work with the screen reader, because I've had apps[ads] and other applications where I can't close it out.

Phase 1 User Study 3

[She can not find the close button as the button is not locatable by using TalkBack]

Phase 1 User Study 3

[Still, TalkBack only focused on the WebView]

Phase 1 User Study 1

I thought about it. But I think that like I would try it. But I would think that if I were to click on general. Again, it would go to an advertisement again.

Phase 1 User Study 1

there's no close button.

Ad has a second page (2)

Phase 3 User Study 2

[Navigates the page to do the task but it is still on the ad page]

This closes the first page of the ad, but it has a second page]

redirects to browser (1)

Plus, I also would be a little concerned that it might open an advertisement for that app in my Google Chrome Browser.

-Cannot close the ad because of Zoom (2)

[The reason for this inaccessibility is because of Zoom's share screen overlay.

This may be another example of where my inability to exit out of it hinders me from using the app because when I've tapped on close, nothing has happened, and the ad is not going away, and I see a link that says Open.

- Failed to find the close/install button (3)

And there is a close button, but I'm guessing. you cannot detect it through talkback.

Interviewee: No.

[he navigates through all the elements again, skipping over the close button as it's unlabeled]

No, I did not even see the close or the install.

Not announcing the type of control (1)

It just says the label but not the type of control it's supposed to be.

ad traps you in webview (1)

particularly because they trap, they sometimes trap you in a WebView

Can not find the desired app element because of an ad (5)

Phase 3 User Study 2

But there's no way of viewing the results of that test, you know, because the ad gets in the way, and there's no visible way to close it.

Phase 1 User Study 3

[Researcher gave a hint to She and She was able to find that button]

Phase 1 User Study 3

She passed the native ad again and still TalkBack announced "Unlabeled" to her. Continue exploring, she also passed the "Create a new file/folder button"

Phase 2 User Study 3

But the information is after the ad.

Phase 2 User Study 1

No, I do not see that button.

WebView is inaccessible (2)

Phase 2 User Study 3

, and I'm dealing with an inaccessible webview.

Phase 2 User Study 1

I mean, sometimes, yes, because sometimes WebView can be a little bit inaccessible depending on the app layout, anything on how they're coded.

redirects to PlayStore (12)

Phase 2 User Study 5

[She clicked the Ad WebView, and she was directed to the google play store.

Phase 2 User Study 4

And it's a actually opens the Google play store.

Phase 2 User Study 4

Sometimes you will tap on an item that you think is a close button. And it's a actually opens the Google play store.

Phase 2 User Study 4

[That opened up the google playstore]

Phase 1 User Study 5

[tries clicking it, which takes her to the Google PlayStore]

Phase 1 User Study 4

[presses WebView and it takes him to the playstore]

Phase 1 User Study 4

Opens the playstore again.

Phase 2 User Study 3

But I don't want to click that link for fear that it might open the Google play page for whatever app it's trying to advertise.

Phase 1 User Study 2

Oh dear, this one even, when I tried to click on the WebView, it took me out of the app into the play store, trying to install something, again, looks as though I'm gonna have to close out of the app and relaunch.

Phase 2 User Study 2

When he clicked on the WebView, he was directed to the Google Play Store]

Phase 1 User Study 1

[tries navigating on the ad, pressing, which leads to the google playstore page]

Phase 1 User Study 2

And, in fact, the fourth advertisement, when I clicked on the ad viewing area, it actually automatically opened up the Google play store.

cannot close ad (15)

Phase 2 User Study 4

So this actually removed my ability to go back.

Phase 2 User Study 5

Probably that last one when I couldn't get past it, and I couldn't find the back button just because I couldn't get out of it, so that would be the one that probably stuck out the most.

Phase 2 User Study 3

No.

Phase 1 User Study 4

definitely the one where it started to play automatically. And I wasn't able to exit it.

Phase 3 User Study 2

But there's no way of viewing the results of that test, you know, because the ad gets in the way, and there's no visible way to close it.

Phase 2 User Study 3

But apparently the close button does not want to work.

Phase 1 User Study 3

when it pops you into an app[ad] you have, you never know if it's gonna work with the screen reader, because I've had apps[ads] and other applications where I can't close it out.

Phase 1 User Study 3

[She can not find the close button as the button is not locatable by using TalkBack]

Phase 1 User Study 3

[Still, TalkBack only focused on the WebView]

Phase 1 User Study 2

This one seems a little bit more invasive because I'm not seeing a way to X out of this ad.

Phase 1 User Study 2

Oh dear, this one even, when I tried to click on the WebView, it took me out of the app into the play store, trying to install something, again, looks as though I'm gonna have to close out of the app and relaunch.

Phase 2 User Study 1

Unfortunately, no, I can't, I can't close this ad.

Phase 1 User Study 1

So I'm trying the talkback back gesture again, and that doesn't seem to work. When I explore the screen there's nothing there.

Phase 2 User Study 2

 I seem to be stuck in something, the back button is not there and I can't seem to find the close button.

Phase 1 User Study 2

[He was directed to the home page, when he was back to the app, the rewarded advertisement still existed]

Ad returns despite restarting app (5)

Phase 2 User Study 4

 I I feel like if I did that and try to come back to the same page, I feel like these advertisements are very much guaranteed.

Phase 2 User Study 4

But I don't know if that would actually fix the advertisement. I I feel like if I did that and try to come back to the same page, I feel like these advertisements are very much guaranteed. The specific type of advertisement is if I were to exit the application and come back to this particular place and try and edit this budget plan. I feel like I would be met with something very similar.

Phase 2 User Study 3

[does so, and upon reopening, the interstitial ad pops up again.

Phase 1 User Study 1

I thought about it. But I think that like I would try it. But I would think that if I were to click on general. Again, it would go to an advertisement again.

Phase 2 User Study 2

 Luckily that's short, but that I still can't seem to get out of the thing and like I could, even if I close the app and reopen it somehow that could come back right.

No ad close button (9)

Phase 2 User Study 4

 So this actually removed my ability to go back.

Phase 2 User Study 5

Probably that last one when I couldn't get past it, and I couldn't find the back button just because I couldn't get out of it, so that would be the one that probably stuck out the most.

Phase 2 User Study 3

 No.

Phase 1 User Study 5

[goes through the whole screen multiple times, over the elements searching for a close button, but there is none]

Phase 1 User Study 3

[She can not find the close button as the button is not locatable by using TalkBack]

Phase 1 User Study 3

[Still, TalkBack only focused on the WebView]

Phase 1 User Study 1

 there's no close button.

Phase 2 User Study 2

 Not so severely, I guess That happened to me at least once and I couldn't find the close button.

Phase 2 User Study 2

 I seem to be stuck in something, the back button is not there and I can't seem to find the close button.

TalkBack back gesture failed to work (5)

Phase 1 User Study 5

 It's not working.

Phase 2 User Study 4

[It exits the app]

Phase 1 User Study 4

[tries it twice but it doesn't do anything]

Phase 2 User Study 3

[The back button exits the app itself.

Phase 1 User Study 1

 So I'm trying the talkback back gesture again, and that doesn't seem to work.

TalkBack failed to generate a label (2)

TalkBack failed to automatically generate a label for the unlabeled button this time.

Talkback tried to OCR it, but it didn't really give a clear label what the button does.

audio/video (1)

I prefer it without because otherwise, you know, how am I going to get it down so I can hear my speech.

---Video should not be loud (1)

If it is a video, not a super loud video.

No video (6)

I prefer it without because otherwise, you know, how am I going to get it down so I can hear my speech. And you know it's just kind of stressful, and that's kind of startling, too, because you're sitting there and all of a sudden, it woo woo woo, yeah, it's kind of startling.

There been videos.

Yeah, for sure. definitely, text, just because the videos, if you're using a screen reader it can get a bit much to have to listen to a voice and another voice, and then music, and then sound effects. And it's just a lot. It can be a lot for some people, especially if they have a other disabilities So definitely, the text only is preferable.

definitely, text, just because the videos, if you're using a screen reader it can get a bit much to have to listen to a voice and another voice, and then music, and then sound effects.

Ideally as small and unintrusive as possible, preferably not videos, because videos again, inhibit my ability, especially if they contain auditory content to hear what my screen reader is saying.

Like, I don't mind but when yeah, when it's a full-screen advertisement, it's like coming in over everything, I wanna block it, like, I don't want video and audio to start just playing because then I can't hear the TalkBack announcement.

Hard to understand the ad contents (2)

Phase 2 User Study 5

I prefer it without because otherwise, you know, how am I going to get it down so I can hear my speech. And you know it's just kind of stressful, and that's kind of startling, too, because you're sitting there and all of a sudden, it woo woo woo, yeah, it's kind of startling.

Phase 1 User Study 2

To let you know, if there's no auditory clues, I can't tell what it is.

The role of the auditory clues (3)

Phase 1 User Study 5

And you know. But if there's gonna be a video I like there to be audio. So at least I can hear what the videos about

Phase 1 User Study 5

that one was silent. Yeah, in fact, I didn't even know it was a video. If you didnt tell me I would have had no idea

Phase 1 User Study 2

To let you know, if there's no auditory clues, I can't tell what it is.

Ad audio interferes with TalkBack announcement (4)

Phase 2 User Study 5

I prefer it without because otherwise, you know, how am I going to get it down so I can hear my speech. And you know it's just kind of stressful, and that's kind of startling, too, because you're sitting there and all of a sudden, it woo woo woo, yeah, it's kind of startling.

Phase 1 User Study 4

Yeah, for sure. definitely, text, just because the videos, if you're using a screen reader it can get a bit much to have to listen to a voice and another voice, and then music, and then sound effects. And it's just a lot. It can be a lot for some people, especially if they have a other disabilities So definitely, the text only is preferable.

Phase 1 User Study 4

definitely, text, just because the videos, if you're using a screen reader it can get a bit much to have to listen to a voice and another voice, and then music, and then sound effects.

Phase 2 User Study 2

Like, I don't mind but when yeah, when it's a full screen advertisement, it's like coming in over everything, I'm gonna have to look for that setting when we get off the line, because I wanna block it like I don't want video and audio to start just playing, because then I can't hear the TalkBack announcement.

Video without audio (5)

Phase 3 User Study 5

Many times I've seen ads where all it is a picture, or like a silent video, and I have no idea what I might be clicking into, those ads make me very nervous.

Phase 1 User Study 5

And you know. But if there's gonna be a video I like there to be audio. So at least I can hear what the videos about.

Phase 1 User Study 5

that one was silent. Yeah, in fact, I didn't even know it was a video. If you didnt tell me I would have had no idea

Phase 2 User Study 5

I prefer it without because otherwise, you know, how am I going to get it down so I can hear my speech.

Phase 3 User Study 2

No, no, I don't hear. I don't hear any audio.

Only uses the phone for specific apps (1)

Phase 2 User Study 2

I used it for a few years but I don't really use my phone too much. I tend to use it for a few things, you know, I write SMS and navigation apps and Youtube, and music player.

-Player controls button disappeared (1)

Phase 2 User Study 3

Yeah, it I believe that button would have showed me controls to play or pause the video or rewind in it. But now that the video is ended, that button has disappeared

-Expect a dynamic ad (1)

Phase 2 User Study 3

My hope was that it was a dynamic and navigating back would make it either disappear or change location to below where the content I wanted to see was.

-Lessen user concern when the unlabeled elements are part of the ad (1)

Phase 2 User Study 3

That does lessen my concern in a sense.

- Pretty open to the new app (1)

Phase 1 User Study 3

I don't think so, because I'm generally pretty open with a new app.

- The Pop-up message (1)

Phase 1 User Study 3

[A pop-up message appeared - Viewing full screen.

--Ad gathers user's information (1)

Phase 3 User Study 3

And I'm guessing that was that was like, you know, that's probably it's probably connected with Google, because they you know, they know where I live.

---Separate the app accessibility and the ad accessibility (1)

Phase 1 User Study 4

not necessarily the application itself, but the advertising itself.

---Pop-up the google play half page (1)

Phase 1 User Study 4

After the video stopped playing, a google play half page overlay popped up.

----accessibility of web-based elements (1)

Phase 2 User Study 4

So browser and web-based applications, anything that uses a a web wrapper. So I would say, advertisements in applications Google like, if something uses a a Google, Chrome Web wrapper kind of thing. that would also be included in this. anything that has headings, anything that has links. Talk back will typically read out as a web view. It sometimes doesn't read specifically web view. But that's typically what it's using in the background is a web based viewer.

----Screen changed without interactions (1)

Phase 2 User Study 4

Okay, now, what I think (is that) the screen just changed, because talk back just announced web view again without me touching the screen. No, I cannot accept this.