CODE

Mobile browsers and cloud gaming – response from the Coalition for Online Data Empowerment (CODE)

About CODE

The Coalition for Online Data Empowerment (CODE) is the trade association for organisations that are helping people take control of their personal data online. We speak for more than 15 businesses across three continents, including Personal Information Management Services, Data Unions, SaaS providers and more.

CODE's members enable better consumer outcomes with respect to personal data, including by assisting with access, understanding and insights, control and consent management, and sharing in its value. Although our members are unique and diverse, they are united by a shared set of firmly-held values regarding user consent, data ownership, security, transparency, and control.[1]

Our members with consumer-facing services deliver these through a range of channels. This includes a handful that operate desktop browser extensions, and a few with web apps. Our submission is therefore focused on those two features of mobile browser competition.

Overarching comments

While your investigation is not directly focused on our coalition's main goals with respect to data portability, it does overlap with some of the challenges our members face in distributing their innovative services to users of mobile devices.

In general, CODE believes markets work best when individual consumers are empowered and free to make the right choice for them. This is counter to many of the restrictions that your investigation is rightly examining with respect to mobile browsers and cloud gaming, and so we are supportive of the investigation and the interventions under consideration.

As is common on laptops and PCs, mobile devices are perfectly capable of delivering high-quality content and online services to their users via the open web, which can include traditional web pages, progressive web applications, and browser extensions or add-ons. With UK consumers using smart phones for the majority of their time online,[2] it is imperative that this full range of choices are fully accessible by mobile device users.

Web apps

As noted above, some of our members have chosen to deliver their services to users via a web app rather than a native app on mobile. Those members reported that this was considered the simplest and most efficient way to distribute the service to users on both desktop and mobile devices. In particular, it has avoided the need to hire separate dedicated iOS and Android engineering resource, keeping costs lower. Relevant members also highlighted that the capabilities of web apps met their needs at this stage of their development, so "there was

[1] More information about CODE can be found on our website.
[2] According to Ofcom's Online Nation report, *'three-quarters of the time spent online per day in May 2023 by adults was on smartphones'.*

currently no need" to develop native apps, while also referencing the "belated and inadequate support for push notifications on iOS" as an example of a potential future challenge.

We agree with the CMA's analysis that there is much more that could be done to support the potential of web apps, so that they can access the same features and functionality as native apps. This should be mandated if the main browsers and browser engine providers are unwilling to do so voluntarily.

The main challenge for web apps highlighted by our members related to discoverability. We therefore urge the CMA to consider interventions to improve how web apps are easily identified and then attached to the home screen in line with native apps. However, in doing so, the CMA would need to be careful not to undermine the benefits of web apps by creating an additional gateway through which Apple and Google can control access and charge high commissions.

Browser extensions

Your issues statement fails to recognise a key competition problem in the mobile browser market. Despite their growth and popularity on desktop devices, browser extensions are still being deliberately held back on mobile devices by both Apple and Google in their respective ecosystems.

- Although Apple has introduced some limited support for browser extensions to Safari on iOS, we understand it is not possible for rival browsers to ship their own extensions due to the requirement for them to use the WebKit browser engine.
- Google has taken the direct opposite approach to Apple. Google allows rival browsers to ship extensions on Android, but it does not itself support extensions to Chrome on mobile.[3] With around three quarters of Android users browsing with Chrome, and with most desktop extensions developed for the Chrome Web Store, this acts as a de facto ban on the distribution of extensions within the Android ecosystem.

Despite the differing approaches from Apple and Google, the outcomes are the same. Ultimately, browser extensions are not fully supported for mobile, neither on iOS nor Android. This matters to consumers – it is not a niche issue. According to a Mozilla blog, around a third of Firefox users on desktop have installed an add-on, and in 2021 there were 121 million total Firefox add-on installs globally.[4] The equivalent figure for Chrome could conceivably be an order of magnitude higher given their relative market shares.[5]

This situation restricts competition and differentiation between mobile browsers through the inclusion of high-quality extensions. It also holds back a potential initial entry route into the mobile browser market. Competition and innovation between browser extension providers is also cut off at source. There is no doubt that the lack of universal support for browser extensions is having an adverse effect on competition.

[3] We recommend the CMA uses its information gathering powers to ask Google for an explanation for this approach, as well as requesting access to internal documents where this issue has been discussed.
[4] Mozilla blog.
[5] We recommend requesting data from Google on the distribution and use of extensions from its Chrome Web Store. This information is not typically made public.

Conclusion

Around half our members distribute their services to their users via either web apps or browser extensions. For the reasons outlined above, those routes to market are heavily restricted on mobile relative to desktop due to decisions imposed by Apple and Google. CODE requests that the CMA takes forward interventions to improve the capabilities and discoverability of web apps, and to unlock distribution of browser extensions for all browsers on iOS and Android devices.