From: Mark Johnson

Sent on: Monday, February 7, 2022 2:12:53 PM

To: Mobile Ecosystems < MobileEcosystems@cma.gov.uk>

Subject: Mobile ecosystem consultation

Dear CMA,

My name is Mark Johnson, I am an senior web developer working for a UK University, developing their online learning platform. I am writing this response to your consultation in a personal capacity, not a representitive of my employer, but drawing on my 15 years of industry experience.

Most of my career has been spent working with Moodle[1], an open source online learning platform which is delivered as a web application, and accessed by users through a web browser. Moodle also offers a smartphone app ("Moodle App") for Android and iOS, in order to offer additional features which require integration with the underlying operating system, such as saving learning content for offline access.

When evaluating whether to deploy the Moodle app in my current job, the conversation arose of turning Moodle into a Progressive Web App (PWA) to enable features we were seeking in the app through our existing platform. The standards exist to support these features, but unforunately iOS only allows the Safari browser, and Apple had failed to implement some key parts of these standards that we would have required. The result is that we have had to develop customations to the Moodle App to support our learning content, and essentially have a second platform for content delivery with all the maintenance and testing required. The cost of this is significant, I would estimate about 4 Full-Time-Equivalence of work goes into this maintenance. This cost to the university is a direct result of Apple's failure to implement the standards needed to support PWAs when they were suppoerted in other browsers, and refusal to allow users to install an alternative browser on iOS.

I hope you find this perspective valuable as part of your consultation.

Yours sincerely Mark Johnson

[1] https://moodle.org/